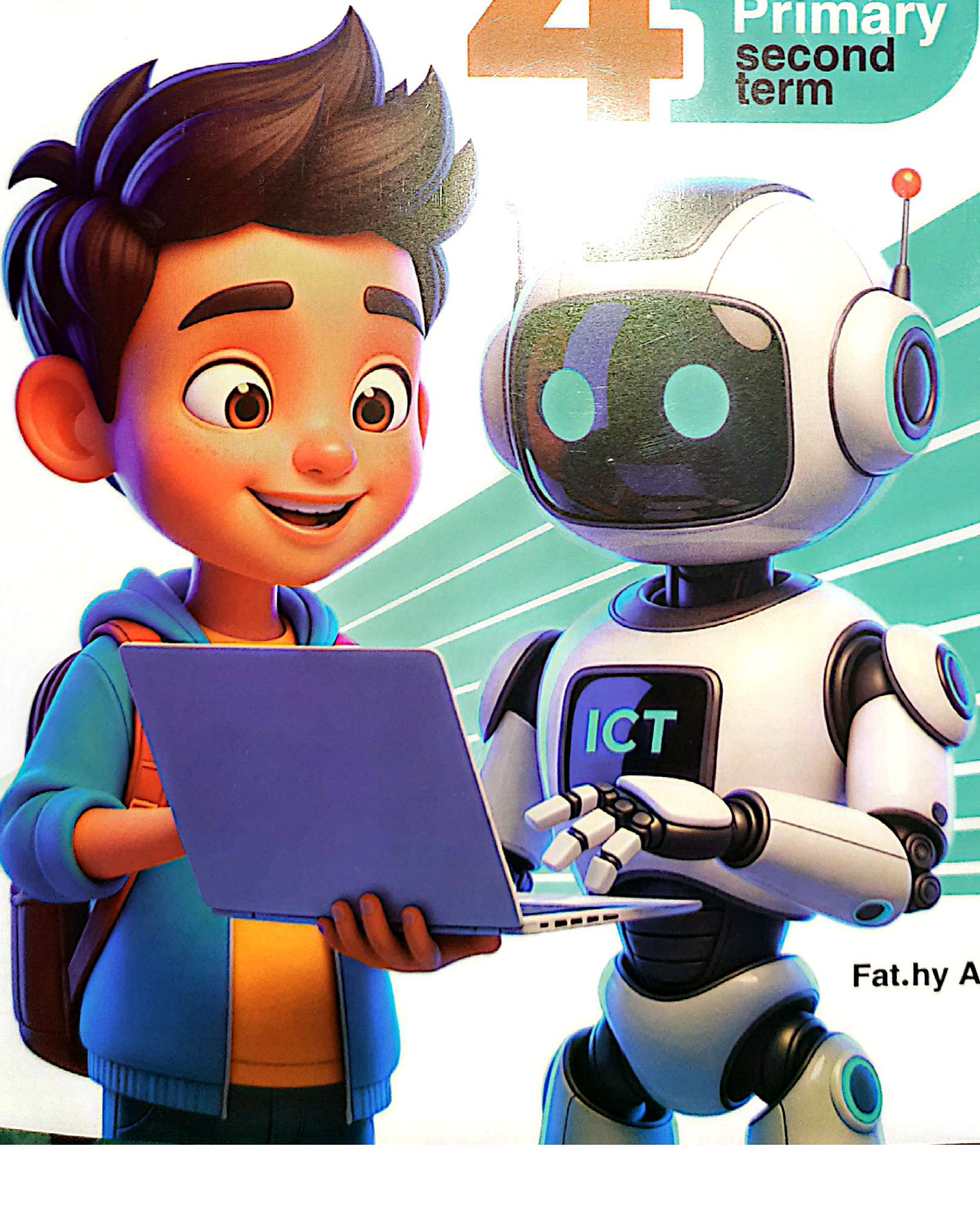
Al Faez

Information and Communication Technology

ICT

2026

4th Primary second term



Fat.hy Abo Zed

CamScanner

منهج جديد

Al Faez

New ICT Curriculum

مطابقاً لآخر تعديلات منهج وزارة التربية والتعليم

ICT

* Explanation by pictures for each lesson.
* Questions for each lesson.
* Ministry book exercises.
* Monthly Model exams .
* A summary for all term titled of (The Exam's Night).
* General tests.
* Full answers for the book questions and test questions.

FOR PRIMARY 4

Second Term

CS CamScanner

Contents

Unit 3: The Digital Citizen in the Online World.

Dictionary of scientific terms of theme 3. 4
Lesson 1: Technological Applications in Our Lives. 6
Lesson 2: Digital Citizenship: My Rights and Responsibilities Online. 10
Lesson 3: Methods of Online Communication: Synchronous and Asynchronous. 16
Lesson 4: Digital Communication Tools. 23
Lesson 5: My Tools for Online Learning. 28
Lesson 6: Digital Research Skills: Planning and Evaluating Sources. 32

Summary of Unit 3. 37
Monthly Exams: March (1) , (2) , (3) 41

Unit 4: My Digital Project.

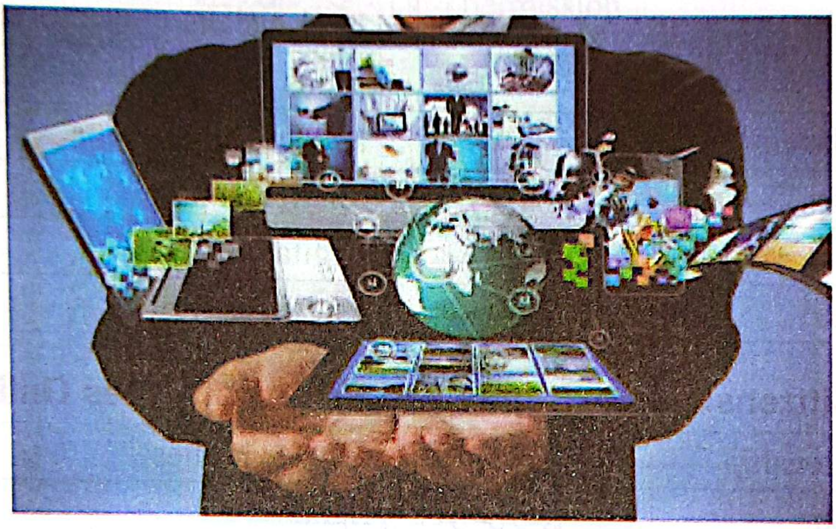
Dictionary of scientific terms of theme 4. 45
Lesson 1: Digital Problem Solving. 47
Lesson 2: Presenting Information. 52
Lesson 3: Algorithms. 57
Lesson 4: Programming: The Computer Language and Game Development. 62
Lesson 5: Exploring the Scratch Program. 67
Lesson 6: Graphic Art: Creating and Editing Digital Images. 75

Summary of Unit 4. 81
Monthly Exams: April (1) , (2) , (3) 84
The night of the exam 87
Final Exams. 99
The Typical answers to all book questions. 117

CamScanner

Unit 3

The Digital Citizen in the Online World



This unit will highlight: نسلط الضوء في هذه الوحدة على

- The importance of technological applications in our lives.
  أهمية التطبيقات التكنولوجية في حياتنا.
- Understanding the rights and responsibilities of a digital citizen.
  تعرف حقوق وواجبات المواطن الرقمي
- Understanding the rules for safe internet use.
  تعرف قواعد الاستخدام الآمن للإنترنت
- Understanding synchronous and asynchronous communication tools.
  تعرف أدوات التواصل المتزامن وغير المتزامن
- Online learning environments and resources. بيئات ومصادر التعلم عبر الإنترنت
- How to plan digital research. كيفية التخطيط لبحث رقمي

CamScanner

Dictionary

أهم الكلمات والمصطلحات

❶ Technological Applications in Our Lives.

Communication	التواصل	solutions	حلول
Creative people	المبدعون	benefit people	يفيد الناس
applications	تطبيقات	Digital tools	الأدوات الرقمية
services	خدمات	pay a bill	دفع فاتورة
entertainment	الترفيه	book tickets	يحجز تذاكر
museum	متحف	trains	القطارات
historical places	أماكن تاريخية	available	متاح
A wealth of	ثروة من	relationships	علاقات
easy access	الوصول السريع	Digital citizen	مواطن رقمي
communities	المجتمعات	a positive way	طريقة إيجابية

❷ Digital Citizenship: My Rights and Responsibilities Online.

Digital Citizenship	المواطنة الرقمية	responsibilities	المسؤوليات
digital citizen	مواطن رقمي	rights	حقوق
responsibly	بمسؤولية	duties	الواجبات
safely	بأمان	Digital footprint	البصمة الرقمية
comments	تعليقات	positive	إيجابي
Protection	حماية	opinions	آراء
the law	القانون	polite	مؤدب
Piracy	القرصنة	Rules	قواعد

❸ Methods of Online Communication: Synchronous and Asynchronous.

communicate	يتواصل	communication	تواصل
real-time	الوقت الفعلي	Phone calls	المكالمات الهاتفية
Instant chat rooms	غرف الدردشة الفورية	direct (live)	مباشر
Synchronous	متزامن	Instant Messaging	المراسلة الفورية
Asynchronous	غير متزامن	Chat Room	غرفة الدردشة

CamScanner

particular	خاص - معين	immediately	فوراً - في الحال
response	الرد	browsers	متصفحات
require	يتطلب	reply later	الرد لاحقا
instant response	استجابة فورية	formal	رَسمي - رَسمية

4 Digital Communication Tools.

Video chats	محادثات الفيديو	Mute the microphone	أغلق الميكروفون
a virtual	افتراضي - افتراضية	permission	إذن
Participant	مشارك	prevent noise	منع الضوضاء
Instant messaging	المراسلة الفورية	Chat rooms	غرف الدردشة
dressed	يرتدي - ترتدي	reply	رد
Email	البريد الالكترونى	the recipient	المتلقى

5 My Tools for Online Learning.

no longer	لم يعد	upload quizzes	تحميل الاختبارات
learning environments	بيئات التعلم	Learning Resources	مصادر التعلم
Experiments	تجارب	Lab	معمل
Discover	يكتشف	reliable sources	مصادر موثوقة
Interactive environment	بيئة تفاعلية	huge	ضخم
articles	مقالات	a virtual	افتراضي - افتراضية

6 Digital Research Skills: Planning and Evaluating Sources.

Planning	تخطيط	reliable	موثوق
Evaluate	قيم	Unreliable	غير موثوق بها
School librarian	أمين مكتبة المدرسة	dinosaurs	الديناصورات
space	فضاء	articles	مقالات
Blogs	مدونات	Spelling mistakes	الأخطاء الإملائية
verified	مدقة - تم التحقق منها	Outline	مخطط
well-written	كتابة جيدة	Final thoughts	أفكار نهائية
opinions	آراء	errors	أخطاء
lies	أكاذيب	Blogs	المدونات

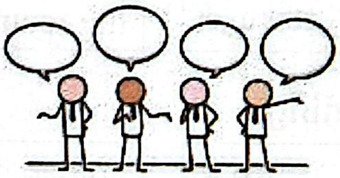
CamScanner

LESSON 1
التطبيقات التكنولوجية فى حياتنا

Technological Applications in Our Lives

- Technology can help us do many things easily and quickly such as:
  - Shopping.
  - Communication.
  - Learning.

تساعدنا التكنولوجيا على عمل أشياء كثيرة في حياتنا بطرق أسهل وأسرع مثل: التسوق والتواصل مع الأقارب أو التعلم.

Shopping التسوق	Communication التواصل	Learning التعلم
		

- Creative people use different digital technology tools to find real solutions that benefit people,

المبدعون يستخدمون أدوات التكنولوجيا الرقمية لإيجاد حلول تفيد الناس،

they can design useful applications and websites.

ويصممون تطبيقات ومواقع إلكترونية مفيدة

Digital tools
الأدوات الرقمية

They are applications that help people easily access the services they need.

هى تطبيقات تساعد الأشخاص فى الحصول على الخدمات التي يحتاجونها بسهولة

Examples:

- If it is difficult to **pay a bill**, you can use an app to access the service you need.

إذا واجهتك صعوبة في دفع فاتورة ،يمكنك استخدام تطبيق للحصول على الخدمة التي تحتاجها

- **Travel and entertainment** have become easier.

أصبحت الرحلات والترفيه أسهل من قبل

You can **book tickets for trains** and **airplanes** or to visit **museums** online.

يمكنك حجز تذاكر القطارات والطائرات أو تذاكر زيارة المتاحف عبر الإنترنت

You can also **book tickets** to visit **historical places** online.

وكذلك يمكنك أيضاً حجز تذاكر زيارة الأماكن الأثرية عبر الإنترنت

A wealth of information is now easily available (like the EKB website).

أصبح من السهل الوصول إلى ثروة من المعلومات، مثل موقع بنك المعرفة المصري

Egyptian Knowledge Bank
بنك المعرفة المصري

- Improving communication:

Technology helps people communicate better, build good relationships, and solve problems.

التكنولوجيا تساعد الناس على التواصل بشكل أفضل، وبناء علاقات جيدة، وحل المشكلات

- Main idea: الفكرة الرئيسية

When we use technology in a positive way: عندما نستخدم التكنولوجيا بطريقة إيجابية

- It helps us become more successful digital citizens,
- and helps communities grow.

- فإنها تساعدنا على أن نكون أكثر نجاحًا في حياتنا ،
- وتساعد المجتمع على التقدّم والنمو.

Al-Faez Exercises

① Choose the correct answer from a, b, c, or d:

1- Travel has become …… through booking tickets online.
a. easier b. harder c. slower d. cheaper

2- …… for trains and airplanes can be booked online.
a. hotels b. food c. luggage d. Tickets

3- Visiting …… and historical places can be booked online.
a. schools b. museums c. factories d. offices

4- A large amount of …… is now easily available online.
a. food b. money c. information d. tools

5- The EKB …… is an example of available online information.
a. game b. website c. device d. app

CamScanner

6- Technology helps people ...... communication.
a. reduce b. stop c. improve d. limit

7- ...... relationships can be built using technology.
a. weak b. Good c. broken d. personal

8- Technology helps people ...... problems.
a. ignore b. create c. solve d. hide

9- Using technology in a ...... way helps people become successful digital citizens.
a. positive b. negative c. careless d. unsafe

10- Positive use of technology helps communities ....
a. shrink b. divide c. stop d. grow

11- ...... helps people do tasks easily and quickly such as shopping, communication and learning.
a. Technology b. education c. culture d. history

12- Creative people use digital technology to find real ...... that benefit people.
a. problems b. solutions c. games d. devices

13- Useful applications and websites are designed using ...... technology tools.
a. social b. paper c. manual d. digital

14- Digital ...... are applications that help people access services easily.
a. tools b. books c. games d. files

15- Paying a bill can be done easily by using an ......
a. letter b. visit c. call d. application

② Put (✓) or (x) in front of each of the following sentences:

1- Tickets for trains and airplanes can be booked online. (   )
2- Museums and historical places cannot be booked online. (   )
3- Entertainment services are easier because of technology. (   )
4- Information is now difficult to find online. (   )
5- The EKB website is an example of available online information. (   )
6- Technology helps improve communication between people. (   )
7- Technology prevents people from building relationships. (   )
8- Technology helps people solve problems. (   )
9- Using technology positively helps people become successful digital citizens. (   )
10- Positive use of technology supports the growth of communities. (   )
11- Technology helps people do many activities easily and quickly. (   )
12- Technology is used only for entertainment and games. (   )
13- Shopping, communication, and learning are examples of technology use. (   )

14- Creative people use digital technology to solve real problems. ( )
15- Digital technology is not useful in people's daily lives. ( )
16- Useful applications and websites are designed using digital tools. ( )
17- Digital tools help people access services easily. ( )
18- Paying bills always requires visiting service offices. ( )
19- Mobile applications can be used to pay bills. ( )
20- Travel has become more difficult because of technology. ( )

③ Complete the following with the suitable words in brackets:

(learning – quickly – solutions – tools – services)

1- Creative people use digital technology to find real ……
2- Useful applications and websites are designed using digital ……
3- Digital tools help people access the …… they need.
4- Technology helps people do many things easily and ……
5- Shopping, communication, and …… are examples of using technology.

④ Complete the following sentences with appropriate words:

1- The EKB website is an example of an educational ……
2- Technology helps people improve ……
3- Technology helps people build good ……
4- Using technology in a positive way helps people become successful digital ……
5- Positive use of technology helps communities ……
6- Paying a bill can be done by using an ……
7- Travel has become …… because of technology.
8- Tickets for trains and airplanes can be booked ……
9- Museums and historical places can be visited by booking tickets ……
10- A wealth of …… is now easily available online.

⑤ Write the scientific concept for each of the following:

1- Applications that help people easily access the services they need.
2- Using applications to pay bills, book tickets, and access services.
3- Designing useful applications and websites to solve real problems.
4- Information that is easily available online such as the EKB website.
5- The correct and positive use of technology to help individuals and communities grow.

CamScanner

LESSON 2
المواطنة الرقمية
حقوقي ومسئولياتي على الإنترنت

Digital Citizenship:
My Rights and Responsibilities Online

Digital Citizenship المواطنة الرقمية

Are you ready to be a good digital citizen?
هل أنت مستعد لتكون مواطناً رقمياً صالحاً

Digital Citizen: المواطن الرقمي

- He is a person who uses technology and the Internet for example, in study and play.

المواطن الرقمي: هو الشخص الذي يستخدم التكنولوجيا والإنترنت على سبيل المثال في الدراسة واللعب

As a digital citizen, you have rights and responsibilities (duties).
بصفتك مواطنًا رقميًا، فأنت لديك حقوق ومسئوليات (واجبات)

- Digital Citizenship:

It is the ability to use digital technology ethically, responsibly, and safely.
المواطنة الرقمية : هي استخدام التكنولوجيا الرقمية بطريقة أخلاقية، ومسئولة وآمنة

Digital citizenship means you should know your rights and responsibilities online.
المواطنة الرقمية تعني أنك ينبغي أن تعرف حقوقك ومسئولياتك على الإنترنت

- Digital Footprint: البصمة الرقمية

- Digital footprint is a record of what you do online, including:

البصمة الرقمية هي تسجيل لكل ما تقوم به على الإنترنت، ويشمل:

→ The websites you visit,
→ the photos you post,
→ and the comments you write.

← المواقع الإلكترونية التي تتصفحها ← الصور التي تنشرها ← والتعليقات التي تكتبها.

• NOTES:

It is important to keep your digital footprint positive,

من المهم أن تكون بصمتك الرقمية إيجابية،

and do not share your personal information or the personal information of others in an unsafe way.

وألا تشارك معلوماتك أو معلومات غيرك بطريقة غير آمنة

Rights and Responsibilities

الحقوق والمسئوليات

As you have rights and responsibilities at school and home, you also have rights and responsibilities online.

كما أن لك حقوقاً وواجبات في المدرسة والمنزل، فلك أيضا حقوق ومسئوليات على الإنترنت

First: Rights

أولاً: الحقوق

❶ Right to Protection: الحق في الحماية

No one can copy your digital footprint or share your photos or videos without your permission.

لا يجوز لأحد نسخ عملك أو مشاركة صورك أو فيديوهاتك دون إذنك

❷ Right to Express Positively: الحق في التعبير الإيجابي

You can share your ideas and opinions kindly, without hurting others.

يمكنك مشاركة أفكارك وآرائك بلطف، دون إيذاء الآخرين

❸ Right to Access the Internet Safely:

الحق في الوصول إلى الإنترنت بأمان

You have the right to use the Internet safely when you need, just follow the law.

لك الحق في استخدام الإنترنت بأمان عندما تريد مع الالتزام بالقوانين

Second: Responsibilities ثانياً: المسئوليات

1. **Respect Intellectual Property rights:** احترام حقوق الملكية الفكرية

   Never commit piracy for protected content. لا تقم أبدًا بقرصنة محتوى محمي

2. **Show Positive Behavior:** اظهر سلوكاً إيجابياً

   Always be polite online and share your ideas positively.

   كن مهذبا دائمًا مع الجميع على الإنترنت، وعبر عن آرائك بأفكار إيجابية

3. **Use the Internet wisely:** استخدم الإنترنت بحكمة

   Watch useful things. شاهد أشياء مفيدة

   It is important to balance online time with spending time with family and friends.

   من المهم تحقيق التوازن بين الوقت الذي يقضيه المستخدمون على الإنترنت والوقت الذي يقضونه مع العائلة والأصدقاء

Piracy: القرصنة

- Piracy is copying or stealing a content, such as a story or a song, to be shared or sold to others.

القرصنة : هي القيام بنسخ أو سرقة محتوى شخص آخر، مثل قصة أو أغنية، لمشاركته أو بيعه للآخرين.

Rules to Use the Internet Safely قواعد الاستخدام الآمن للإنترنت

→ Use strong passwords. استخدم كلمات مرور قوية

→ Credit sources from which you took the information.

لا تصدق كل ما تجده، وثق المراجع والمعلومات

→ Monitor online screen time. راقب الوقت الذي تقضيه على الإنترنت

→ Use updated software. استخدم برامج محدثة

Al-Faez Exercises

① Choose the correct answer from a, b, c, or d:

1- Positive expression means sharing ideas …… without hurting others.
a. negatively b. rudely c. carelessly d. kindly

2- Safe Internet access requires following the ……
a. time b. habit c. rules d. law

3- Respecting intellectual property prevents committing ……
a. sharing b. piracy c. playing d. learning

4- Positive online behavior requires being ……
a. polite b. rude c. careless d. lazy

5- Using the Internet wisely includes watching …… content.
a. boring b. random c. useful d. negative

6- Balancing online time with family helps manage ……
a. time b. money c. food d. sleep

7- Piracy involves copying or …… content illegally.
a. creating b. sharing c. stealing d. deleting

8- Strong …… help protect online accounts.
a. passwords b. games c. files d. websites

9- Crediting sources means giving …… to the information you use.
a. time b. credit c. fun d. energy

10- Updated software helps keep the Internet ……
a. offline b. slow c. broken d. safe

11- A digital citizen uses technology for study and ……
a. play b. sleep c. travel d. eat

12- Digital citizenship means using technology …… and safely.
a. ethically b. slowly c. carelessly d. randomly

13- A digital footprint is a record of what you do ……
a. online b. offline c. outside d. home

14- Keeping a digital footprint positive means not sharing …… information unsafely.
a. public b. general c. personal d. random

15- The right to protection means no one can copy your …… without permission.
a. footprint b. homework c. files d. passwords

② Put (✓) or (x) in front of each of the following sentences:

1- Piracy is legally copying or sharing content with permission. (   )
2- Strong passwords help protect online accounts. (   )
3- Crediting sources is unnecessary when using online information. (   )
4- Updated software helps keep the Internet safe. (   )
5- Balancing online time with family and friends is part of responsible digital behavior. (   )
6- A digital citizen ignores their rights and responsibilities online. (   )
7- The right to access the Internet safely allows anyone to use it responsibly. (   )
8- Negative online behavior helps maintain a positive digital footprint. (   )
9- A digital citizen must know both rights and responsibilities online. (   )
10- Online safety includes monitoring screen time and using strong passwords. (   )
11- A digital citizen uses technology for study and play. (   )
12- Digital citizenship means using technology carelessly and randomly. (   )
13- A digital footprint records your online activities, including websites visited and comments written. (   )
14- Sharing personal information unsafely is part of keeping a positive digital footprint. (   )
15- The right to protection means no one can copy your digital footprint without permission. (   )
16- Positive expression online means sharing ideas kindly without hurting others. (   )
17- Safe Internet access requires following the law. (   )
18- Respecting intellectual property means committing piracy for protected content. (   )
19- Positive online behavior includes being polite and sharing ideas positively. (   )
20- Using the Internet wisely includes watching useful content and balancing online time. (   )

CamScanner

③ Complete the following with the suitable words in brackets:

(personal – comments – play – safely – digital footprint)

1- A digital footprint records the websites you visit, photos you post, and …… you write.

2- Keeping a digital footprint positive means not sharing …… information unsafely.

3- The right to protection prevents others from copying your ….. without permission.

4- A digital citizen uses technology for study and ……

5- Digital citizenship means using technology ethically, responsibly, and ……

④ Complete the following sentences with appropriate words:

1- Positive expression means sharing ideas kindly without …… others.

2- Safe Internet access requires following the ……

3- Respecting intellectual property prevents committing ……

4- Positive online behavior includes being polite and sharing ideas ……

5- Using the Internet wisely includes watching …… content.

6- Balancing online time with family and friends is part of using the Internet ……

7- Piracy is copying or …… content illegally.

8- Strong …… help protect online accounts.

9- Crediting sources gives …… to the information used.

10- Using updated software helps keep the Internet ……

⑤ Write the scientific concept for each of the following:

1- A person who uses technology and the Internet for study, play, and other activities.

2- The ability to use digital technology ethically, responsibly, and safely.

3- A record of what you do online, including websites visited, photos posted, and comments written.

4- Copying or stealing content, such as stories or songs, to share or sell illegally.

5- Following rules such as using strong passwords, crediting sources, and monitoring screen time to stay safe online.

CamScanner

LESSON 3
طرق التواصل عبر الإنترنت المتزامن وغير المتزامن

Methods of Online Communication: Synchronous and Asynchronous

- There are two main ways to communicate online, and both are useful.

هناك طريقتان أساسيتان للتواصل عبر الإنترنت وكلتاهما مفيدتان

Online Communication → Synchronous Communication / Asynchronous Communication

First: Synchronous Communication: التواصل المتزامن

- It is like face-to-face communication, but online.

هو نوع من التواصل يشبه التحدث وجهًا لوجه ولكن عبر الإنترنت

- It is real-time communication. يحدث الاتصال في الوقت الفعلي
- It involves instant response. يحتاج إلى استجابة فورية
- Communication happens at the same time (simultaneously).

يحدث التواصل في نفس الوقت بين الطرفين (في وقت واحد)

Examples:

1 Video chats محادثات الفيديو	2 Live television shows البرامج التليفزيونية المباشرة	3 Phone calls المكالمات الهاتفية
4 Instant chat rooms غرف الدردشة الفورية	5 Talking to your classmate in class التحدث مع زميلك في الفصل	

Synchronous Communication Tools: أدوات التواصل المتزامن

Video Chats: محادثات الفيديو

- They allow direct (live) communication with one or more people,
  تسمح بالتواصل المباشر مع شخص أو أكثر
  everyone can see and hear each other instantly.
  حيث يمكن للأشخاص رؤية وسماع بعضهم بعضًا فورًا

Tools needed. الأدوات اللازمة

- A device with a camera and a microphone, جهاز مزود بكاميرا وميكروفون
  a video chat app for the mobile or a program for the computer.
  وتطبيق على الهاتف أو برنامج على الكمبيوتر

Instant Messaging (IM): المراسلة الفورية

- You can send text messages, pictures, and videos.
  يمكنك إرسال رسائل وصور وفيديوهات
  Messages arrive instantly. تصل الرسائل على الفور

Tools needed. الأدوات اللازمة

- An instant messaging app for the mobile تطبيق المراسلة الفورية على الهاتف المحمول
  or a program for the computer. أو برنامج مراسلة فورية على الكمبيوتر

Chat Rooms: غرف الدردشة

- These allow you to communicate in a group. تتيح لك التواصل في مجموعة
  They usually focus on one particular subject, تركز عادة على موضوع معين
  the response is immediately. والاستجابة تكون فورية

Tools needed. الأدوات اللازمة

- Mobile apps, تطبيقات الهاتف المحمول
  or web browsers, such as: Internet Explorer or Google Chrome.
  أو متصفحات الويب مثل: متصفح إنترنت إكسبلورر أو جوجل كروم.

CamScanner

Second: Asynchronous Communication: التواصل غير المتزامن

- Asynchronous Communication is exchanging information between people that do not necessarily communicate at the same time.

التواصل غير المتزامن هى عملية تبادل المعلومات بين الأشخاص لا يتواصلون بالضرورة في نفس الوقت

- It does not require an instant response. لا يتطلب استجابة فورية

You can send a message, and the other person can read it and reply later.

يمكنك إرسال رسالة، ويمكن للشخص الآخر قراءتها والرد عليها لاحقاً.

Asynchronous Communication Tool أدوات التواصل الغير المتزامن

Email: البريد الإلكتروني

- It is used for formal or long messages.

يُستخدم للرسائل الرسمية أو الطويلة

- You can send an email to your teacher or an official.

يمكنك إرسال بريد الكتروني إلى معلمك والتواصل مع المسؤولين

Tools needed. الأدوات اللازمة

- An email app

→ or web browser to access an email website on your device.

تطبيق بريد إلكتروني ← أو متصفح ويب للوصول إلى موقع بريد إلكتروني على جهازك

When do we use synchronous and asynchronous communication?

متى نستخدم التواصل المتزامن وغير المتزامن؟

Synchronous Communication

- When you need an instant response.
- When sharing information and files quickly.
- When discussing a school topic quickly.

عند الحاجة إلى رد فوري
عند تبادل المعلومات والملفات بسرعة
عند مناقشة موضوع دراسي سريع

CamScanner

Asynchronous Communication

- When sending formal messages.
- When sending important and large files (such as school homework).
- When you do not need an instant response.

عند إرسال رسائل رسمية
عند إرسال ملفات مهمة وكبيرة (مثل الواجبات المدرسية)
عندما لا تحتاج إلى رد فوري

Mobile application: تطبيق الموبايل

It is a program on your device that gives you direct access to different programs, such as email, IM, social media, and video chats.

هو برنامج على جهازك يمنحك وصولاً مباشراً إلى برامج مختلفة، مثل البريد الإلكتروني، والرسائل الفورية، ووسائل التواصل الاجتماعي، ومحادثات الفيديو

Email		[IM] instant messaging
Social Media		Video Chats

Al-Faez Exercises

① Choose the correct answer from a, b, c, or d:

1- Asynchronous communication is useful when sending important and ….. files.
a. slow b. small c. fast d. large

2- Mobile applications give direct access to programs such as email, IM, social media, and ……
a. newspapers chats b. homework c. books d. video

3- Instant messaging allows sending ……, pictures, and videos instantly.
a. files b. calls c. text d. papers

4- Video chats require a device with a camera and a ……
a. keyboard b. microphone c. mouse d. printer

5- Synchronous communication happens ……, while asynchronous communication does not.
a. slowly b. simultaneously c. occasionally d. never

6- Synchronous communication is similar to …… communication but online.
a. face-to-face b. email c. letter d. text

7- Communication that happens at the same time is called ……
a. email b. asynchronous c. synchronous d. chat

8- Examples of synchronous communication include video chats, live television shows, and ……
a. phone calls b. emails c. homework d. letters

9- Video chats allow direct communication with one or more people who can see and …… each other.
a. read b. ignore c. hear d. write

10- Tools needed for instant messaging include a mobile app or a …… program.
a. printer b. television c. computer d. book

11- Chat rooms usually focus on one particular ……
a. subject b. person c. device d. game

12- Asynchronous communication does not require an …… response.
a. weekly b. slow c. daily d. instant

13- Email is an example of …… communication.
a. asynchronous b. synchronous c. live d. chat

14- Synchronous communication is suitable when discussing a school ... quickly.

a. topic b. book c. game d. rule

15- Real-time communication requires an …… response.

a. formal b. delayed c. optional d. instant

② Put (✓) or (x) in front of each of the following sentences:

1- Asynchronous communication is useful for sending formal messages. (   )

2- Large files, such as school homework, are suitable for asynchronous communication. (   )

3- Synchronous communication is used when quick discussion of school topics is needed. (   )

4- Mobile applications give direct access to email, IM, social media, and video chats. (   )

5- Instant messaging apps require a camera and microphone to work. (x   )

6- Video chats require a device with a camera and microphone. (   )

7- Synchronous communication happens simultaneously, while asynchronous communication does not. (   )

8- Chat rooms provide communication only between two people. (   )

necessary. (   )

10- Mobile applications are programs that cannot access email or social media. (   )

11- Synchronous communication is like face-to-face communication but online. (   )

12- Real-time communication happens with an instant response. (   )

13- Communication that happens at the same time is asynchronous. (   )

14- Examples of synchronous communication include video chats, live television shows, and phone calls. (   )

15- Video chats allow people to see and hear each other instantly. (   )

16- Instant messaging delivers text, pictures, and videos instantly. (   )

17- Chat rooms usually focus on multiple unrelated subjects. (   )

18- Tools for synchronous communication include mobile apps and web browsers. (   )

19- Asynchronous communication requires an instant response. (   )

20- Email is a tool used for asynchronous communication. (   )

③ Complete the following with the suitable words in brackets:

(instant – synchronous - phone calls – hear – online)

1- Examples of synchronous communication include video chats, live television shows, and ……

2- Video chats allow people to see and …… each other instantly.

3- Synchronous communication is like face-to-face communication but ……

4- Real-time communication involves an …… response.

5- Communication that happens at the same time is called ……

④ Complete the following sentences with appropriate words:

1- Tools needed for video chats include a camera and a ……

2- Instant messaging allows sending text, pictures, and …… instantly.

3- Chat rooms allow communication in a ……, usually focused on one topic.

4- Asynchronous communication does not require an …… response.

5- Email is used for …… or long messages.

6- Asynchronous communication is suitable for sending large …… such as school homework.

7- Synchronous communication is used when discussing a school …… quickly.

8- Mobile applications give direct access to email, IM, social media, and ……

9- Asynchronous communication allows the other person to read and reply ……

10- Tools for chat rooms include mobile apps or …… such as Internet Explorer or Google Chrome.

⑤ Write the scientific concept for each of the following:

1- Communication that happens in real time, with instant responses.

2- Communication that does not happen at the same time and allows replies later.

3- A tool used for formal or long messages that can be read and replied to later.

4- A platform that allows group communication, usually focused on one topic, with immediate responses.

5- Programs on a device that give direct access to email, IM, social media, and video chats.

LESSON 4
أدوات الاتصال الرقمية

Digital Communication Tools

Now, we learn how to use each tool correctly and responsibly.
الآن ، نتعلم كيف نستخدم كل أداة بطريقة صحيحة ومسئولة

First: Video Chats: محادثات الفيديو

- **To join a video chat:** للانضمام إلى محادثة فيديو
  → Click the link
  → and wait to be "let in" by the person who started the video chat.
  انقر على الرابط وانتظر حتى يتم السماح لك بالدخول من قبل الشخص الذي بدأ محادثة الفيديو

Notice: A video chat is like a virtual classroom. محادثة الفيديو أشبه بفصل دراسي افتراضي

Some important rules to be followed during a video chat
بعض القواعد المهمة التي يجب اتباعها أثناء محادثة الفيديو

1 Camera and microphone: الكاميرا والميكروفون

- Make sure the microphone and camera are ON (after getting permission).
  تأكد من تشغيل الميكروفون والكاميرا (بعد الحصول على إذن)

2 Respect others: احترم الآخرين

- When someone is talking, mute your microphone to prevent noise.
  عندما يتحدث شخص ما، قم بكتم صوت الميكروفون الخاص بك لمنع الضوضاء من الوصول إلى الآخرين

3 If the camera is ON: إذا كانت الكاميرا قيد التشغيل

- Be properly dressed. ارتدِ ملابس مناسبة
- Behave as if in a public place. وتصرف كما لو كنت في مكان عام
- Make sure there is nothing in your background that indicates your address or any personal information that you do not want to share.
  تأكد من عدم وجود أي شيء في خلفيتك يشير إلى عنوانك أو أي معلومات شخصية لا ترغب في أن يراها الآخرون

Second: Chat Rooms: غُرف الدردشة

- **In the chat room:** في غرفة الدردشة

- You can simply type and send your comment.
- You can also reply to messages.
- Some participants may reply to your message.

- يمكنك ببساطة كتابة تعليقك وإرساله
- كما يمكنك الرد على الرسائل
- قد يرد بعض المشاركين على رسالتك أيضًا

- **Notice:**

Anyone who has access to the chat room will be able to read your messages, so:

أي شخص لديه حق الوصول إلى غرفة الدردشة سيكون قادرًا على قراءة رسائلك؛ لذلك:

→ Be polite. كن مهذبًا

→ Be helpful. كن مفيدًا

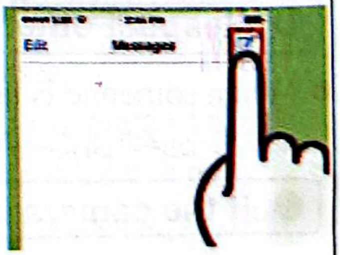
→ Be positive. كن إيجابيًا

Third: Instant Messaging: المراسلة الفورية

- Instant messaging is a fun, casual (informal) way to communicate.

المراسلة الفورية هي وسيلة ممتعة وغير رسمية للتواصل

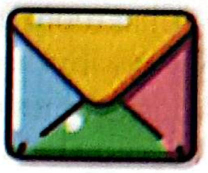
Steps to send an instant message: خطوات إرسال رسالة فورية



1. Click on the name of the person you want to chat with.
2. Type your message.
3. Click on the "Send" icon.

1. انقر على اسم الشخص الذي ترغب في الدردشة معه
2. اكتب رسالتك .
3. انقر على أيقونة «إرسال».

Email: البريد الإلكتروني



Email is commonly used in more **formal situations**, such as:

- Messaging your teacher
 or dealing with an official body.

يُستخدم البريد الإلكتروني عادةً في المواقف الأكثر رسمية، مثل:

- **مراسلة معلمك**
 أو التعامل مع جهة رسمية

To send an email: لإرسال بريد الكتروني

❶ In the "To" field: Write the email address of the recipient.

❷ In the "Subject" line: Provide clear information on the (title) topic of the email (e.g., Digital Citizenship Homework).

❶ **كتابة عنوان بريد المرسل إليه (الشخص الذي ترسل له) في خانة "To"**

❷ **في سطر الموضوع "Subject": اكتب معلومات واضحة عن موضوع البريد الإلكتروني (على سبيل المثال، واجب المواطنة الرقمية).**

Rules of Using Email: قواعد استخدام البريد الإلكتروني

- Be sure to use correct grammar
- Be polite and clear.
- Use greetings and endings.
- If you're sending attachments, be sure they are safe and accurate.

- **استخدم القواعد النحوية السليمة.**
- **كن مهذبًا وواضحًا.**
- **استخدم عبارات التحية والختام.**
- **إذا كنت ترسل مرفقات، تأكد من أن المعلومات التي ترسلها آمنة وصحيحة.**

Al-Faez Exercises

① Choose the correct answer from a, b, c, or d:

1- Background should not show personal ……

a. photos b. books c. toys d. information

2- In chat rooms, everyone can read your ……

a. games b. files c. messages d. emails

3- Chat room messages should be polite, helpful, and ……
a. positive b. negative c. rude d. careless

4- Instant messaging is a …… way to communicate.
a. casual b. formal c. official d. serious

5- Sending an instant message requires clicking on the person's ……
a. email b. photo c. name d. chat

6- Email is commonly used in …… situations.
a. casual b. formal c. fun d. instant

7- The "To" field in an email is for the ……
a. date b. sender c. topic d. recipient

8- The "Subject" line in an email provides the …… of the message.
a. topic b. greeting c. file d. time

9- Email rules include using correct grammar, being polite, and giving proper …
a. messages b. endings c. files d. links

10- Email attachments must be safe and ……
a. fun b. fast c. casual d. accurate

11- Video chats are similar to a ……
a. book b. classroom c. game d. letter

12- Joining a video chat requires clicking a ……
a. file b. button c. link d. program

13- Microphone and camera should be …… after getting permission.
a. off b. on c. muted d. hidden

14- Muting the microphone prevents …… during a video chat.
a. noise b. messages c. emails d. replies

15- Camera should be on only when properly ……
a. removed b. hidden c. muted d. dressed

② Put (✓) or (x) in front of each of the following sentences:

1- Email is commonly used in informal situations like chatting with friends. ( )

2- The "To" field in an email is for writing the recipient's email address. ( )

3- The "Subject" line provides clear information about the topic of the email. ( )

4- Using correct grammar and being polite are rules for writing emails. ( )

5- Emails do not need greetings or proper endings. ( )

6- Attachments in emails should be safe and accurate. ( )

7- Video chat participants do not need to dress properly if the camera is on. ( )

8- Chat room participants should be helpful and positive. ( )

CamScanner

9- Instant messaging requires formal language similar to emails. ( )
10- Using digital communication tools responsibly involves following all the rules mentioned in the text. ( )
11- Video chats are like a virtual classroom. ( )
12- To join a video chat, you should click the link and wait to be "let in." ( )
13- The microphone and camera should be ON after getting permission.( )
14- Muting your microphone during a video chat helps prevent noise. ( )
15- It is acceptable to leave personal information visible in the background during a video chat. ( )
16- Chat rooms allow you to type and send comments, and reply to messages. ( )
17- Everyone in a chat room can read your messages. ( )
18- Messages in chat rooms should be rude and careless to get attention.( )
19- Instant messaging is a casual and informal way to communicate. ( )
20- Sending an instant message requires clicking on the person's name, typing the message, and clicking "Send." ( )

③ Complete the following with the suitable words in brackets:

(virtual – noise – dressed – on – link)

1- Muting your microphone during a video chat helps prevent ……
2- If the camera is on, you should be properly ……
3- Video chats are like a …… classroom.
4- To join a video chat, you should click the ……
5- The microphone and camera should be …… after getting permission.

④ Complete the following sentences with appropriate words:

1- Sending an instant message requires clicking on the person's ……
2- Email is commonly used in more …… situations.
3- The "To" field in an email is for the recipient's ……
4- The "Subject" line provides clear information about the …… of the email.
5- Email rules include using correct grammar, being polite, and giving proper:
6- Attachments in emails must be safe and ……
7- The background should not show any …… information.
8- In chat rooms, you can type and send ……
9- Chat room participants should be polite, helpful, and ……
10- Instant messaging is a …… and informal way to communicate.

CamScanner

LESSON 5
أدواتي للتعلم عبر الإنترنت

My Tools for Online Learning

- Learning is no longer just inside the classroom.
  لم يعد التعلم يقتصر على الفصل الدراسي فقط
  - Now you can learn and communicate with your teachers and classmates regardless of where they are.
    الآن يمكنك التعلم والتواصل مع معلميك وزملائك في الفصل بغض النظر عن مكان وجودهم
  - Now you can conduct experiments and discover a lot of information while you are at home through online learning environments.
    الآن يمكنك إجراء التجارب واكتشاف الكثير من المعلومات وأنت في المنزل من خلال بيئات ومصادر التعلم عبر الإنترنت

Online Learning Environments بيئات التعلم عبر الإنترنت

- Online learning environments, such as Edmodo:
  بيئات التعلم عبر الإنترنت، مثل إدمودو
  - They allow teachers and students to communicate, no matter where they are.
    تتيح هذه الوسائل للمعلمين والطلاب التواصل، بغض النظر عن مكان وجودهم
  - Teachers can provide virtual lessons and upload quizzes and homework for students to access.
    بإمكان المعلمين تقديم دروس افتراضية وتحميل الاختبارات والواجبات المنزلية ليتمكن الطلاب من الوصول إليها

  - Students can also send messages to their teachers and post their assignments.
    يمكن للطلاب أيضا إرسال رسائل إلى معلميهم ونشر واجباتهم

Online Learning Resources مصادر التعلم عبر الإنترنت

When you are looking for information, there are many sources online, but you should always rely on reliable sources.

عندما تبحث عن معلومات، ستجد العديد من المصادر على الإنترنت، ولكن يجب عليك دائماً الاعتماد على المصادر الموثوقة

Egyptian Knowledge Bank (EKB):

Egyptian Knowledge Bank
بنك المعرفة المصري

- It is a huge digital library in Egypt.
- It contains various sources and topics (articles, videos) in all fields.

مكتبة رقمية ضخمة في مصر . تحتوي على مصادر ومواضيع متنوعة (مقالات، فيديوهات) في جميع المجالات.

- Website link. http://ekb.eg رابط الموقع

Vlaby: فلابي

- It is a virtual lab platform. هي منصة مختبر افتراضي

It enables students and teachers to do lab experiments in an interactive environment.

منصة فلابي عبارة عن معمل افتراضي. تُمكن الطلاب والمعلمين من إجراء التجارب المعملية في بيئة تفاعلية

Platform link: https://vlaby.com رابط المنصة

Interactive Mapmaker مصمم الخرائط التفاعلي

- It is a free tool that works on tablets and laptops.
- It provides tools for online mapping.
- It allows data collection and research using maps.

- مصمم الخرائط التفاعلي أداة مجانية تعمل على الأجهزة اللوحية وأجهزة الكمبيوتر المحمولة
- توفر أدوات لرسم الخرائط عبر الإنترنت
- تتيح جمع البيانات وإجراء البحث فيها باستخدام الخرائط

You can use it via the link. يمكنك استخدامه عبر الرابط

https://mapmaker.nationalgeographic.org

CamScanner

Al-Faez Exercises

① Choose the correct answer from a, b, c, or d:

1- The Egyptian Knowledge Bank (EKB) is a huge digital ……
a. library b. lab c. platform d. book

2- EKB contains various sources such as …… and videos.
a. games b. articles c. maps d. chats

3- Vlaby is a virtual …… platform.
a. classroom b. lab c. library d. map

4- Interactive Mapmaker works on tablets and ……
a. TVs b. phones c. laptops d. books

5- Mapmaker provides tools for online ……
a. mapping b. gaming c. chatting d. reading

6- Mapmaker allows data collection and …… using maps.
a. reading b. playing c. research d. calling

7- Students can conduct experiments and discover information while at ……
a. library b. school c. park d. home

8- Online learning tools help students communicate and learn ……
a. effectively b. rarely c. poorly d. late

9- Online learning allows students to learn …… the classroom.
a. nowhere b. outside c. anywhere d. inside

10- Students can communicate with teachers and classmates ……
a. rarely b. remotely c. offline d. late

11- Edmodo is an example of an …… learning environment.
a. manual b. physical c. online d. casual

12- Teachers can upload …… for students to access.
a. games b. quizzes c. books d. toys

13- Students can send …… to their teachers.
a. calls b. emails c. videos d. messages

14- Reliable …… should be used when searching for information online.
a. sources b. books c. websites d. apps

15- Vlaby allows students to do …… in an interactive environment.
a. readings b. games c. quizzes d. experiments

② Put (✓) or (x) in front of each of the following sentences:

1- Learning is no longer just inside the classroom. ( )
2- Online learning allows communication only with classmates, not teachers. ( )
3- Students can conduct experiments at home through online learning. ( )

4- Edmodo is an example of an online learning environment. ( )
5- Teachers can upload quizzes and homework on Edmodo. ( )
6- Students cannot send messages to their teachers using Edmodo. ( )
7- Reliable sources should always be used when searching for information online.
8- The Egyptian Knowledge Bank (EKB) contains only books. ( )
9- EKB provides articles and videos in various fields. ( )
10- Vlaby is a virtual lab platform for interactive experiments. ( )
11- Vlaby cannot be used by teachers. ( )
12- Interactive Mapmaker is a free tool for tablets and laptops. ( )
13- Mapmaker allows online mapping and data collection. ( )
14- Mapmaker does not support research using maps. ( )
15- Online learning tools help students learn only inside school. ( )
16- Students can discover information and conduct experiments at home. ( )
17- Edmodo allows communication between teachers and students regardless of location. ( )
18- The EKB is a digital library in Egypt. ( )
19- Interactive Mapmaker cannot be accessed via a web link. ( )
20- Online learning tools help students communicate, learn, and conduct experiments effectively. ( )

③ Complete the following with the suitable words in brackets:

(experiments – online – homework – classroom – classmates)

1- Learning is no longer just inside the ……
2- Students can communicate with teachers and …… from anywhere.
3- Online learning allows students to conduct …… at home.
4- Edmodo is an example of an …… learning environment.
5- Teachers can upload quizzes and …… for students on Edmodo.

④ Complete the following sentences with appropriate words:

1- Vlaby allows students and teachers to do experiments in an …… environment.
2- Interactive Mapmaker works on tablets and ……
3- Mapmaker provides tools for online ……
4- Mapmaker allows data collection and …… using maps.
5- Online learning tools help students communicate, learn, and discover ……
6- Students can send …… to their teachers using Edmodo.
7- Reliable …… should be used when searching for information online.
8- The Egyptian Knowledge Bank (EKB) is a huge digital …… in Egypt.
9- EKB contains various sources such as articles and ……
10- Vlaby is a virtual …… platform.

CamScanner

LESSON 6
مهارات البحث الرقمي
تخطيط وتقييم المصادر

Digital Research Skills: Planning and Evaluating Sources

Planning Your Digital Research. التخطيط لبحثك الرقمي

1. It's important to plan before conducting a digital search.
2. Make sure the collected information is correct and reliable.

1. من المهم التخطيط قبل إجراء أي بحث رقمي (يساعدك التخطيط على جمع المعلومات المطلوبة)
2. تأكد من صحة وموثوقية المعلومات التي جمعتها.

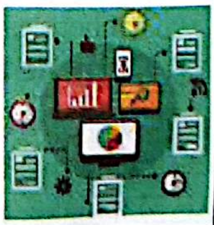
Before you start searching, think about the following three steps.
قبل أن تبدأ البحث، فكر في الخطوات الثلاث التالية:

1. Choose your topic. اختر موضوع البحث الخاص بك
2. Choose the type of sources. اختر أنواع المصادر الإلكترونية التي ستستخدمها
3. Evaluate the sources. قيم المصادر التي اخترتها

1 Choose your topic: اختر موضوع بحثك

Topics may be about dinosaurs, space, or protecting the environment.
قد تتناول مواضيع مثل الديناصورات، أو الفضاء، أو حماية البيئة

Set the goal: حدد الهدف



1. What do you know about the topic? ما الذي تعرفه عن الموضوع
2. What else do you want to learn about it? ما الذي ترغب في معرفته أيضا
3. Think and write notes. فكر ودون ملاحظاتك

2 Choose the types of sources: اختر أنواع المصادر

A digital search can include many sources, such as text, audios, videos, and images
يمكن أن يشمل البحث الرقمي العديد من المصادر مثل: النصوص والصوت والفيديو والصور

You can ask your teacher, parents, or school librarian to choose reliable sources for your research. يمكنك أن تطلب من معلمك أو والديك أو أمين مكتبة المدرسة لاختيار مصادر موثوقة لبحثك

❸ Evaluate the types of sources: قيم أنواع المصادر

Are these sources reliable or unreliable?

هل هذه المصادر موثوقة أم غير موثوقة؟

Evaluating Sources تقييم المصادر

Reliable Sources. مصادر موثوقة

- They are articles or information written and verified by experts.
- The information is presented in a professional fashion.
- They are well-written, without grammar or spelling mistakes.

- هي مقالات أو معلومات مكتوبة ومُدققة من قِبل خبراء
- عرض المعلومات بأسلوب احترافي
- وهي مكتوبة بأسلوب جيد، وخالية من الأخطاء النحوية والإملائية

Examples:

- Egyptian Knowledge Bank (EKB).
- Official government sites.
- Digital school books.

Egyptian Knowledge Bank

أمثلة: بنك المعرفة المصري – المواقع الحكومية الرسمية – الكتب المدرسية الرقمية

Unreliable sources. مصادر غير موثوقة

- They include information full of opinions, errors, and even lies.

تحتوي المصادر غير الموثوقة معلومات مليئة بالآراء والأخطاء وحتى الأكاذيب

Examples:

- Wiki pages.
- Blogs.
- Social media sites, such as Facebook.

- So, you must be careful of information you find on these sources.

أمثلة: صفحات الويكي – المدونات – مواقع التواصل الاجتماعي، مثل الفيسبو

لذا، يجب عليك توخي الحذر من المعلومات التي تجدها في هذه المصادر

Note: Focus on your topic. Always ask: Is this reliable.

ملحوظة: ركز على موضوعك. اسأل دائماً: هل هذا موثوق؟

Organizing and Writing Your Report: تنظيم وكتابة تقريرك

- After collecting notes from reliable sources, it is time to write the report in a logical and organized way.

بعد جمع الملاحظات من مصادر موثوقة، حان الوقت لكتابة التقرير بطريقة منطقية ومنظمة

- Using an outline: استخدام مخطط تفصيلي

- Use your notes to write an outline.
- The outline will help you present the information in your report in a logical way.

- استخدم مخططاً لتنظيم ملاحظاتك قبل البدء في الكتابة
- سيساعدك المخطط التفصيلي على عرض المعلومات في تقريرك بطريقة منطقية

- Your outline should include the following: يجب أن يتضمن مخططك التفصيلي ما يلي

❶ Introduction: It introduces the topic of the report (What will you research?).

❷ Supporting Paragraphs:

They present the information you found about the topic (Details of your research).

❸ Conclusion: It includes the final thoughts about the information you provided (What did you learn?).

❶ المقدمة: تعرض موضوع التقرير (ما الذي ستبحث عنه؟)

❷ الفقرات الداعمة: تعرض المعلومات التي توصلت إليها حول الموضوع (تفاصيل بحثك)

❸ الخاتمة: تتضمن الأفكار الختامية حول المعلومات التي قدمتها (ماذا تعلمت؟)

Al-Faez Exercises

① Choose the correct answer from a, b, c, or d:

1- Teachers, parents, or a school ...... can help choose reliable sources.
   a. librarian   b. principal   c. student   d. friend

2- Reliable sources are written and verified by ......
   a. bloggers   b. students   c. friends   d. experts

3- Reliable sources are well-written, without grammar or spelling ......
   a. ideas   b. notes   c. mistakes   d. opinions

4- Examples of reliable sources include EKB, official government sites, and digital ...... books.
   a. library   b. school   c. online   d. story

CamScanner

5- Unreliable sources often contain opinions, errors, or ……
a. facts b. lies c. data d. quotes

6- Wiki pages, blogs, and social media sites such as …… are considered unreliable sources.
a. government b. EKB c. Facebook d. textbooks

7- An outline helps present information in a …… way.
a. logical b. messy c. casual d. random

8- The introduction of a report introduces the ……
a. date b. source c. author d. topic

9- The conclusion includes final thoughts and what you have ……
a. copied b. written c. learned d. shared

10- Planning is important before starting a …… search.
a. paper b. digital c. library d. casual

11- The first step in digital research is to choose your ……
a. topic b. goal c. source d. question

12- Topics can include dinosaurs, space, or protecting the ……
a. school b. planet c. home d. environment

13- Setting the goal helps to know what you know and what you want to ……
a. play b. write c. read d. learn

4- Notes should be taken while thinking about your ……
a. source b. topic c. library d. goal

15- A digital search can include text, audio, video, and ……
a. maps b. books c. games d. images

② Put (✓) or (x) in front of each of the following sentences:

1- Examples of reliable sources include EKB, official government sites, and digital school books. ( )
2- Unreliable sources include information full of opinions, errors, or lies. ( )
3- Wiki pages, blogs, and social media sites such as Facebook are reliable sources. ( )
4- Evaluating sources helps determine whether information is reliable or unreliable. ( )
5- An outline is used to organize notes and present information logically in a report. ( )
6- The introduction of a report introduces the topic being researched. ( )
7- Supporting paragraphs in a report present details from the research. ( )
8- The conclusion of a report summarizes final thoughts and what you have learned. ( )
9- Focusing on your topic is not necessary when evaluating sources. ( )

CS CamScanner

10- Digital research skills include planning, evaluating sources, and organizing information in a report. ( )
11- Planning is important before conducting a digital search. ( )
12- Collected information does not need to be reliable. ( )
13- The first step in digital research is choosing your topic. ( )
14- Topics can include dinosaurs, space, or protecting the environment.( )
15- Setting the goal helps identify what you already know and what you want to learn. ( )
16- Notes should not be taken while thinking about your topic. ( )
17- A digital search can include text, audio, video, and images. ( )
18- Teachers, parents, or school librarians can help choose reliable sources. ( )
19- Reliable sources are written and verified by experts. ( )
20- Reliable sources may contain grammar or spelling mistakes. ( )

③ Complete the following with the suitable words in brackets:

(environment – digital – learn – reliable – topic)

1- Planning is important before conducting a ...... search.
2- The collected information must be correct and ......
3- The first step in planning digital research is to choose your ......
4- Examples of topics include dinosaurs, space, or protecting the ......
5- Setting the goal includes thinking about what you know and what else you want to ......

④ Complete the following sentences with appropriate words:

1- Examples of reliable sources include EKB, official government sites, and digital ...... books.
2- Unreliable sources include information full of opinions, errors, or ......
3- Examples of unreliable sources include Wiki pages, blogs, and social media sites such as ......
4- An outline helps present information in a ...... way.
5- The conclusion of a report includes final thoughts and what you have ......
6- Notes should be taken while thinking about your ......
7- A digital search can include many types of ...... such as text, audio, video, and images.
8- Teachers, parents, or school ...... can help choose reliable sources.
9- Reliable sources are written and verified by ......
10- Reliable sources are well-written, without grammar or spelling ......

Summary of unit (3)

Lesson 1: Technological Applications in Our Lives.

- Technology helps us do many daily activities easily and quickly, such as shopping, communication, and learning.

تُسهّل التكنولوجيا علينا إنجاز العديد من الأنشطة اليومية بسهولة وسرعة، كالتسوق والتواصل والتعلم.

- Creative people use digital technology to design useful applications and websites that help solve real problems.

يستخدم المبدعون التكنولوجيا الرقمية لتصميم تطبيقات ومواقع إلكترونية مفيدة تُسهم في حلّ مشكلات واقعية.

- Digital tools make it easy for people to access services, such as paying bills using mobile applications.

تُسهّل الأدوات الرقمية الوصول إلى الخدمات، كدفع الفواتير عبر تطبيقات الهاتف المحمول.

- Technology has also made travel and entertainment easier, as people can book tickets for trains, airplanes, museums, and historical places online.

كما سهّلت التكنولوجيا السفر والترفيه، إذ يُمكن حجز تذاكر القطارات والطائرات والمتاحف والمواقع التاريخية عبر الإنترنت

- In addition, a large amount of information is now available online, such as educational websites.

بالإضافة إلى ذلك، يتوفر الآن كمّ هائل من المعلومات على الإنترنت، كالمواقع التعليمية.

- Technology improves communication by helping people build good relationships and solve problems.

تُحسّن التكنولوجيا التواصل من خلال مساعدة الناس على بناء علاقات جيدة وحلّ المشكلات.

- When technology is used in a positive way, it helps people become successful digital citizens and supports the growth of communities.

عندما تُستخدم التكنولوجيا استخدامًا إيجابيًا، فإنها تُساعد الأفراد على أن يصبحوا مواطنين رقميين ناجحين، وتُسهم في نموّ المجتمعات

Lesson 2: Digital Citizenship: My Rights and Responsibilities Online.

- A **digital citizen** is a person who uses technology and the Internet for study, play, and other activities.

المواطن الرقمي هو الشخص الذي يستخدم التكنولوجيا والإنترنت للدراسة واللعب والأنشطة الأخرى.

- **Digital citizenship** means using technology ethically, responsibly, and safely, while knowing your rights and responsibilities online.

المواطنة الرقمية تعني استخدام التكنولوجيا بشكل أخلاقي ومسؤول وآمن، مع معرفة حقوقك ومسؤولياتك على الإنترنت

- **Digital Footprint** is a record of what you do online, including websites visited, photos posted, and comments written.

البصمة الرقمية هي سجل لأنشطتك على الإنترنت، بما في ذلك المواقع التي تزورها، والصور التي تنشرها، والتعليقات التي تكتبها.

It is important to keep your digital footprint positive and avoid sharing personal information unsafely.

من المهم الحفاظ على بصمتك الرقمية إيجابية وتجنب مشاركة معلوماتك الشخصية بطريقة غير آمنة

- **Piracy**: Copying or stealing content, like stories or songs, to share or sell without permission.

القرصنة: نسخ أو سرقة المحتوى، مثل القصص أو الأغاني، لمشاركته أو بيعه دون إذن.

Lesson 3: Methods of Online Communication: Synchronous and Asynchronous.

- **There are two main methods of online communication: synchronous and asynchronous.** هناك طريقتان رئيسيتان للتواصل عبر الإنترنت: التواصل المتزامن والتواصل غير المتزامن

Synchronous Communication التواصل المتزامن	Asynchronous Communication التواصل غير المتزامن
- Happens in real time, like face-to-face communication. - Requires instant responses and communication happens simultaneously. - يحدث في الوقت الفعلي، مثل التواصل وجهًا لوجه. - يتطلب استجابات فورية، ويحدث التواصل في آنٍ واحد **Examples:** Video chats, live television shows, phone calls, instant chat rooms, talking in class. أمثلة: محادثات الفيديو، البرامج التلفزيونية المباشرة، المكالمات الهاتفية، غرف الدردشة الفورية، التحدث في الصف Tools: Video chats. Instant Messaging (IM). Chat Rooms. الأدوات: محادثات الفيديو - المراسلة الفوري - غرف الدردشة. When to use: متى يستخدم For instant responses, sharing files quickly, or discussing school topics in real time.	Communication does not happen at the same time; response is not instant. لا تتم عملية التواصل في الوقت نفسه، ولا يكون الرد فوريًا. Example: Email, used for formal or long messages. مثال: البريد الإلكتروني، يُستخدم للرسائل الرسمية أو الطويلة Tools: Email app or web browser to access email. الأدوات: تطبيق البريد الإلكتروني أو متصفح الويب للوصول إلى البريد الإلكتروني. When to use: متى يستخدم For formal messages, sending important or large files (like homework), or when an instant response is not needed. للرسائل الرسمية، وإرسال الملفات المهمة أو الكبيرة (مثل الواجبات المنزلية)، أو عندما لا تكون هناك حاجة إلى رد فوري

Lesson 4: Digital Communication Tools.

- Digital communication tools help people communicate online correctly and responsibly. تساعد أدوات التواصل الرقمي الأشخاص على التواصل عبر الإنترنت بشكل صحيح ومسؤول

❶ Video Chats: Like a virtual classroom.

To join, click the link and wait to be "let in."

محادثات الفيديو: مثل فصل دراسي افتراضي.

للانضمام، انقر على الرابط وانتظر حتى يُسمح لك بالدخول.

Rules: القواعد

- Turn on camera and microphone (with permission).
- Mute microphone when others talk to avoid noise.
- Dress properly and ensure background does not show personal information.

- شغّل الكاميرا والميكروفون (بعد الحصول على إذن).
- كتم صوت الميكروفون عند تحدث الآخرين لتجنب الضوضاء.
- ارتدِ ملابس مناسبة وتأكد من أن الخلفية لا تُظهر معلومات شخصية.

❷ Chat Rooms:

You can type and send messages, and reply to others.

Everyone can read your messages.

غرف الدردشة: يمكنك كتابة الرسائل وإرسالها، والرد على الآخرين.

يمكن للجميع قراءة رسائلك

❸ Instant Messaging (IM): المراسلة الفورية

Informal and fun way to communicate. طريقة غير رسمية وممتعة للتواصل

Email:

Used in formal situations, such as messaging teachers or officials.

البريد الإلكتروني: يُستخدم في المواقف الرسمية، مثل مراسلة المعلمين أو المسؤولين

Lesson 5: My Tools for Online Learning.

- Students can learn and communicate with teachers and classmates from anywhere.
- Online learning allows experiments and discovering information at home.

يستطيع الطلاب التعلم والتواصل مع المعلمين والزملاء من أي مكان.

يتيح التعلم الإلكتروني إجراء التجارب واكتشاف المعلومات من المنزل

Online Learning Environments:

Platforms like Edmodo allow teachers and students to communicate remotely.

بيئات التعلم الإلكتروني: تتيح منصات مثل Edmodo للمعلمين والطلاب التواصل عن بُعد

CamScanner

- Teachers can provide virtual lessons, quizzes, and homework.
- Students can send messages and post assignments.

بإمكان المعلمين تقديم دروس افتراضية، واختبارات قصيرة، وواجبات منزلية.
بإمكان الطلاب إرسال الرسائل ولنشر الواجبات.

Online Learning Resources: مصادر التعلم الإلكترونى

Egyptian Knowledge Bank (EKB)	Vlaby	Interactive Mapmaker
A huge digital library with articles, videos, and topics in all fields. بنك المعرفة المصري: مكتبة رقمية ضخمة تضم مقالات وفيديوهات ومواضيع في جميع المجالات.	A virtual lab platform for interactive experiments. منصة فلابي: معمل افتراضي للتجارب التفاعلية.	A free tool for tablets and laptops to create maps, collect data, and conduct research. مصمم الخرائط التفاعلي: أداة مجانية للأجهزة اللوحية وأجهزة الكمبيوتر المحمولة لإنشاء الخرائط وجمع البيانات وإجراء الأبحاث

Lesson 6: Digital Research Skills: Planning and Evaluating Sources.

- **Three steps before searching:**

1- Choose your topic.
2- Choose the type of sources (text, audio, video, images).
3- Evaluate the sources for reliability.

ثلاث خطوات قبل البحث:
1- اختر موضوعك.
2- اختر نوع المصادر (نص، صوت، فيديو، صور). 3- قيّم موثوقية المصادر.

Reliable sources مصادر موثوقة	Unreliable sources مصادر غير موثوقة
- Written and verified by experts. - Professionally presented, well-written, no grammar or spelling mistakes. Examples: Egyptian Knowledge Bank (EKB), official government sites, digital school books. - مكتوب ومُدقّق من قِبل خبراء. - مُقدّم باحترافية، مكتوب بأسلوب جيد، خالٍ من الأخطاء النحوية والإملائية. أمثلة: بنك المعرفة المصري، المواقع الحكومية الرسمية، الكتب المدرسية الرقمية	Contain opinions, errors, or lies. Examples: Wiki pages, blogs, social media sites like Facebook. قد تحتوي على آراء أو أخطاء أو معلومات مغلوطة. أمثلة: صفحات ويكيبيديا، المدونات، مواقع التواصل الاجتماعي مثل فيسبوك - Organizing and Writing Your Report: - Use collected notes to create an outline. تنظيم وكتابة تقريرك: - استخدم الملاحظات التي جمعتها لإنشاء مخطط تفصيلي.

TEST 1

① Choose the correct answer from a, b, c, or d:

1- In chat rooms, everyone can read your ……

a. games
b. files
c. messages
d. emails

2- Video chats are similar to a ……

a. book
b. classroom
c. game
d. letter

3- Travel has become …… through booking tickets online.

a. easier
b. harder
c. slower
d. cheaper

4- The Egyptian Knowledge Bank (EKB) is a huge digital ……

a. library
b. lab
c. platform
d. book

5- Students can conduct experiments and discover information while at ……

a. library
b. school
c. park
d. home

6- Teachers, parents, or a school …… can help choose reliable sources.

a. librarian
b. principal
c. student
d. friend

7- A digital search can include text, audio, video, and ……

a. maps
b. books
c. games
d. images

② Put (✓) or (x) in front of each of the following sentences:

1- Entertainment services are easier because of technology. ( )

2- Muting your microphone during a video chat helps prevent noise. ( )

3- Piracy is legally copying or sharing content with permission. ( )

4- Strong passwords help protect online accounts. ( )

5- Asynchronous communication is useful for sending formal messages. ( )

6- Information is now difficult to find online. ( )

7- Wiki pages, blogs, and social media sites such as Facebook are reliable sources. ( )

8- Crediting sources is unnecessary when using online information. ( )

CamScanner

① Choose the correct answer from a, b, c, or d:

1- Sending an instant message requires clicking on the person's ……
a. email b. photo
c. name d. chat

2- Chat room messages should be polite, helpful, and ……
a. positive b. negative
c. rude d. careless

3- EKB contains various sources such as …… and videos.
a. games b. articles
c. maps d. chats

4- Interactive Mapmaker works on tablets and ……
a. TVs b. phones
c. laptops d. books

5- Visiting …… and historical places can be booked online.
a. schools b. museums
c. factories d. offices

6- Reliable sources are written and verified by ……
a. bloggers b. students
c. friends d. experts

7- Wiki pages, blogs, and social media sites such as …… are considered unreliable sources.
a. government b. EKB
c. Facebook d. textbooks

② Put (✓) or (x) in front of each of the following sentences:

1- Students cannot send messages to their teachers using Edmodo. ( )
2- Technology helps improve communication between people. ( )
3- Positive use of technology supports the growth of communities. ( )
4- Synchronous communication is used when quick discussion of school topics is needed. ( )
5- Mobile applications give direct access to email, IM, social media, and video chats. ( )
6- Negative online behavior helps maintain a positive digital footprint. ( )
7- Updated software helps keep the Internet safe. ( )
8- Balancing online time with family and friends is part of responsible digital behavior. ( )

Monthly Exams: March — TEST 3

① Choose the correct answer from a, b, c, or d:

1- Email is commonly used in …… situations.
   a. casual   b. formal
   c. fun   d. instant

2- Instant messaging is a …… way to communicate.
   a. casual   b. formal
   c. official   d. serious

3- Mapmaker provides tools for online ……
   a. mapping   b. gaming
   c. chatting   d. reading

4- …… for trains and airplanes can be booked online.
   a. hotels   b. food
   c. luggage   d. Tickets

5- Vlaby is a virtual …… platform.
   a. classroom   b. lab
   c. library   d. map

6- Planning is important before starting a …… search.
   a. paper   b. digital
   c. library   d. casual

7- Unreliable sources often contain opinions, errors, or ……
   a. facts   b. lies
   c. data   d. quotes

② Put (✓) or (x) in front of each of the following sentences:

1- The microphone and camera should be ON after getting permission.(   )
2- Shopping, communication, and learning are examples of technology use. (   )
3- A digital citizen ignores their rights and responsibilities online. (   )
4- The right to access the Internet safely allows anyone to use it responsibly.
5- Large files, such as school homework, are suitable for asynchronous communication. (   )
6- Mobile applications are programs that cannot access email or social media. (   )
7- Online learning allows communication only with classmates, not teachers. (   )
8- Focusing on your topic is not necessary when evaluating sources. (   )

CamScanner

Unit 4

My Digital Project

This unit will highlight: نسلط الضوء في هذه الوحدة على

- How to solve digital problems. كيفية حل المشكلات الرقمية
- Digital tools that can be used to design posters and billboards.
  الأدوات الرقمية التي يمكن استخدامها لتصميم الملصقات واللوحات الإعلانية
- Understanding algorithms and their importance. فهم الخوارزميات وأهميتها
- The importance of programming in creating games and animations.
  أهمية البرمجة في ابتكار الألعاب والرسوم المتحركة
- How to use Scratch. كيفية استخدام برنامج Scratch
- How to use graphic design tools to create graphics.
  كيفية استخدام أدوات فن الجرافيك لابتكار الرسومات

Dictionary

أهم الكلمات والمصطلحات

Digital Problem Solving.

daily life	الحياة اليومية	Technology problems	مشكلات تكنولوجية
organized steps	خطوات منظمة	fix the problem	حل المشكلة
Hypothesis Construct	يبني فرضية	guess	يخمن
Mistake	خطأ	may damage	قد يضر
Step-by-step	خطوة خطوة	ask yourself	اسأل نفسك
sections	أقسام	complicated	معقد
per student	لكل طالب	class trip	رحلة صفية
principle	مبدأ	the price	السعر

Presenting Information.

digital poster	ملصق رقمي	effectively	بشكل فعال
billboard	لوحة إعلانية	Bundle	حزمة أو مجموعة - باقة
slides	شرائح	flyers	النشرات
Margin	الهامش	cramped	مزدحم
digital concepts	المفاهيم الرقمية	unappealing	غير جذاب
distracting	تشتيت الانتباه	Cramped	مكتظ

Algorithms.

Algorithm	خوارزمية	specific task	مهمة محددة
Instructions	تعليمات	surfaces	الأسطح
series of steps	سلسلة من الخطوات	Clarity	الوضوح
Effectiveness	فعالية	Accuracy	الدقة
search engines	محركات البحث	Keywords	الكلمات الرئيسية

Programming: The Computer Language and Game Development.

imagine	يتخيل	Think logically	يفكر بطريقة منطقية
coding	لغة البرمجة	A maze	متاهة
big recipe	وصفة كبيرة	Series of steps	خطوات متسلسلة

CamScanner

animations	الرسوم المتحركة
Computational thinking	التفكير البرمجي
Creativity	الإبداع

Problem solving	حل المشكلات
movies	أفلام
Entertainment	ترفيه - تسلية

5 Exploring the Scratch Program.

Block-based coding	البرمجة بالكتل
Learning environment	بيئة تعلم
Drag and drop	السحب والإلقاء
open-source	مفتوح المصدر
stacking	التراص
Script	المقطع البرمجي
Main Screen	الشاشة الرئيسية
Divided into	مقسمة إلى
Workspace	مساحة العمل

Interactive games	ألعاب تفاعلية
Story-based lessons	دروس مبنية على قصص
Puzzles	الألغاز
integrated with	متكاملة مع
official website	الموقع الرسمي
without	بدون
Main sections	أقسام رئيسية
Assemble	تجمع - يجمع
Green flag	العلم الأخضر

6 Graphic Art: Creating and Editing Digital Images.

Graphic Art	فن الجرافيك
creating	ابتكار
own drawings	الرسومات الخاصة
Icons	أيقونات
Insert menu	قائمة إدراج
Edit picture	تعديل الصورة
3D models	ثلاثية الأبعاد
until	حتى
direction	اتجاه

Microsoft Paint	برنامج الرسام
Accessories	الملحقات
a popular	شائع
Menu bar	شريط المهام
Toolbox	مربع الأدوات
Fill colors	تعبئة الألوان
SmartArt	الرسوم التخطيطية
enough space	مساحة كافية
color options	خيارات الألوان

CamScanner

LESSON 1
حل المشكلات الرقمية

Digital Problem Solving

- In our daily life, we may face problems when using technology.
Sometimes solving the problem looks very hard.
But if we follow clear and organized steps, solving the problem becomes much easier.

- في حياتنا اليومية، قد نواجه مشكلات أثناء استخدام التكنولوجيا.
أحيانًا يبدو حل المشكلة صعبًا للغاية
لكن إذا اتبعنا خطوات واضحة ومنظمة، يصبح حل المشكلة أسهل بكثير

Steps to Solve a Problem

خطوات حل المشكلات

- Solving technology problems needs logical thinking steps to understand and fix the problem.

يتطلب حل المشكلات التقنية خطوات تفكير منطقية لفهم المشكلة وإصلاحها

1 Construct a Hypothesis: بناء فرضية

- **Hypothesis**: It is an educated guess about how the problem happened.
The hypothesis is the starting point that you can test.
- الفرضية: هي تخمين مبني على أسس علمية حول كيفية حدوث المشكلة
الفرضية هي نقطة البداية التي يمكنك اختبارها

2 Test the Hypothesis: اختبار الفرضية

- Test your idea carefully and safely. اختبر فكرتك بعناية وأمان
- Do not try anything that may damage your device.
لا تُجرب أي شيء قد يُلحق الضرر بجهازك
- The test should be safe and planned. يجب أن يكون الاختبار آمنًا ومدروسًا

③ Learning from Mistake: التعلم من الخطأ

- If your test does not work, ask yourself: إذا لم ينجح الاختبار، اسأل نفسك
  - What went wrong? ما الخطأ الذي حدث
  - What did I learn? وماذا تعلمت
- We learn from our mistakes and use what we learned to make a better hypothesis next time.
نحن نتعلم من أخطائنا، ونستخدم ما تعلمناه لتكوين فرضية أفضل في المرة القادمة

Breaking Down Problems into Smaller parts

تقسيم المشكلات إلى أجزاء صغيرة

- Some ICT problems may be more complicated, like:
  → Internet not working.
  → An app is not opening.

قد تكون بعض مشكلات تكنولوجيا المعلومات والاتصالات أكثر تعقيداً، مثل:
← مشكلة في الاتصال بالانترنت. ← أو تطبيق لا يعمل.

Therefore: لذا:

① Break down the big problem into small sections. ① قسم المشكلة الكبيرة إلى أجزاء صغيرة
② Solve each section step-by-step. ② حل كل جزء خطوة بخطوة

Real-Life Example مثال من الواقع

- Your teacher asks you to help organize a class trip:
يطلب منك معلمك المساعدة في تنظيم رحلة صفية

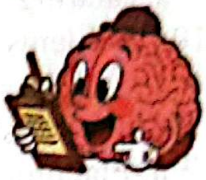
It may be difficult, but when you break it into small tasks such as:
قد يكون الأمر صعباً، ولكن عندما تقسمه إلى مهام صغيرة مثل:

① Decide the destination. تحديد وجهة الرحلة
② Determine the date of the trip. تحديد موعد الرحلة
③ Find out the price per student. معرفة سعر الرحلة لكل تلميذ

That makes it becomes much easier. بذلك يصبح الأمر أسهل بكثير

- This is the same principle we use to solve big technology problems.
وهذا هو نفس المبدأ الذي نستخدمه لحل المشكلات التكنولوجيا الكبيرة

Important notes to solve problems ملاحظات هامة لحل المشكلات



① When solving a big technology problem, start with the parts you can do by yourself, step-by-step, until the big problem is solved.

② If the problem is very complicated, ask your teacher for help.

③ **Asking for help.** طلب المساعدة

It makes big problems easier to solve.

④ If you are working in a group, give each person one small part to solve.

① عند حل مشكلة تكنولوجية كبيرة، ابدأ بالأجزاء التي يمكنك إنجازها بنفسك، خطوة بخطوة، حتى يتم حل المشكلة بالكامل

② إذا كانت المشكلة معقدة للغاية، فاطلب المساعدة من معلمك

③ طلب المساعدة: يُسهل حل المشكلات الكبيرة

④ إذا كنت تعمل ضمن مجموعة، فخصص لكل شخص جزءًا صغيرًا لحله

Al-Faez Exercises

① Choose the correct answer from a, b, c, or d:

1- The first step in solving a technology problem ……
a. Test b. Hypothesis c. Mistake d. Help

2- A careful check of your idea……
a. Test b. Break c. Plan d. Learn

3- Understanding what went wrong in a failed attempt……
a. Hypothesis b. Mistake c. Learning d. Problem

4- Dividing a big problem into smaller sections……
a. Organizing b. Breaking c. Planning d. Solving

5- The type of guess based on knowledge……
a. Hypothesis b. Test c. Step d. Section

6- Safe method to check if a solution works……
a. Mistake b. Test c. Break d. Group

7- Using knowledge from errors to improve solutions……
a. Learning b. Planning c. Breaking d. Hypothesis

8- A small part of a big problem……
a. Section b. Step c. Task d. Test

9- Assigning parts of a problem to group members……
a. Sharing b. Planning c. Testing d. Hypothesis

10- Problems like internet not working are usually……
a. Small b. Easy c. Complicated d. Solved

11- Step-by-step method to solve a problem……
a. Planning b. Solving c. Organizing d. Testing

12- Asking a teacher when the problem is too hard……
a. Ignore b. Help c. Test d. Break

13- A task in organizing a class trip……
a. Price b. Mistake c. Hypothesis d. Test

14- Method used for learning from mistakes……
a. Testing b. Learning c. Breaking d. Hypothesis

15- Step to start solving a big problem yourself……
a. Plan b. Break c. Share d. Hypothesis

② Put (✓) or (x) in front of each of the following sentences:

1- Learning from mistakes is not necessary when a solution works immediately. (   )
2- Asking a teacher for help can simplify very complicated problems. (   )
3- Hypothesis, testing, and learning are unrelated steps in problem solving. (   )
4- A small section of a problem is easier to solve than the whole problem at once. (   )
5- Breaking down a problem is only useful for non-technical tasks. (   )
6- Step-by-step solving makes organizing tasks like a class trip easier. (   )
7- Each person in a group should work on the same part of the problem. (   )
8- Hypothesis helps identify the possible cause of a problem. (   )
9- Testing a hypothesis should be random without any planning. (   )
10- Technology problem solving requires logical thinking and careful steps. (   )
11- Solving technology problems is easier when following clear and organized steps. (   )
12- A hypothesis is a random guess without any reasoning. (   )
13- Testing a hypothesis must be done carefully and safely. (   )
14- Learning from mistakes helps to improve future solutions. (   )
15- Big technology problems should never be broken down into smaller parts. (   )
16- Dividing a problem into sections helps solve it step by step. (   )

CamScanner

17- Internet not working is considered a simple problem. ( )
18- Assigning small tasks to group members can make solving big problems easier. ( )
19- Testing a hypothesis can be done without any safety precautions. ( )
20- Constructing a hypothesis is the first step in problem solving. ( )

③ Complete the following with the suitable words in brackets:

(hypothesis – testing – clear – sections – mistakes)

1- The first step to solve a technology problem is to construct a ……
2- Problems become easier to solve when following …… and organized steps.
3- The process of checking your idea carefully and safely is called ……
4- Learning from …… helps to improve the next hypothesis.
5- Big problems should be divided into smaller ……

④ Complete the following sentences with appropriate words:

1- Testing must be done carefully and …… to avoid damage.
2- Each mistake provides an opportunity for …… and improvement.
3- Breaking down a problem into smaller sections is also called …… problems.
4- A …… is an educated guess about how a problem happened.
5- Step-by-step problem solving requires …… thinking.
6- Solving each section …… makes the problem easier.
7- Internet not working or an app not opening are examples of …… problems.
8- Assigning a small task to each group member is part of …… problem solving.
9- A teacher can provide …… when the problem is very complicated.
10- The step-by-step method helps organize tasks, like a class ……

⑤ Write the scientific concept for each of the following:

1- An educated guess about how a technology problem happened that serves as a starting point to test.
2- The careful and safe process of checking whether an idea about a problem is correct.
3- The process of understanding what went wrong in a failed attempt and using that knowledge to improve the next attempt.
4- Dividing a complex problem into smaller, manageable parts to solve step by step.
5- Assigning different small tasks to group members to solve a large problem more efficiently.

CamScanner

LESSON 2
تقديم المعلومات

Presenting Information

- When we want to present information or advertise an idea in an attractive way, we use digital tools to design a digital poster or billboard.

عندما نرغب في عرض المعلومات أو الإعلان عن فكرة بطريقة جذابة، فإننا نستخدم الأدوات الرقمية لتصميم ملصق رقمي أو لوحة إعلانية

- We will learn about the tools and how to design effectively.

لنتعلم الأدوات وكيفية التصميم الجيد

Digital Tools for Presenting Information

الأدوات الرقمية لتقديم المعلومات

Microsoft 365's bundle offers excellent options for designing posters or billboards.

حزمة برامج Microsoft 365 تقدم خيارات ممتازة لتصميم الملصقات واللوحات الإعلانية

PowerPoint	**Microsoft PowerPoint**: ● It is used to create presentations. ● It create attractive slides easily and quickly. **مايكروسوفت باوربوينت:** يُستخدم لإنشاء العروض التقديمية يُتيح إنشاء شرائح جذابة بسهولة وسرعة

Word	**Microsoft Word:** ● It is used for writing text. ● It can be used to create simple posters. **معالج الكلمات مايكروسوفت وورد:** يُستخدم لكتابة النصوص ويمكن استخدامه لإنشاء ملصقات بسيطة

Publisher®	**Microsoft Publisher:** ● It is a professional program to design posters and flyers in an organized way. **برنامج النشر المكتبي:** برنامج احترافي لتصميم الملصقات والنشرات الإعلانية بشكل منظم

- **Notice**: لاحظ

- To access these programs, you must have Microsoft 365 on your device.
- Make sure your device is updated to be able to download and run the programs.

- للوصول إلى هذه البرامج، يجب أن يكون لديك حزمة Microsoft 365 على جهازك
- تأكد من تحديث جهازك لتتمكن من تنزيل البرامج وتشغيلها

Digital Concepts to Consider

مفاهيم رقميه يجب مراعاتها

- When creating your poster or billboard, think about the following digital concepts.

عند تصميم ملصقك أو لوحتك الإعلانية، يجب أن تفكر في المفاهيم الرقمية التالية لجعله جذابًا وسهل القراءة

Margins: الهوامش

- A margin: It is the empty space around the edges of your poster or billboard.
- Keep a fixed margin of 2.5 cm.
- Don't crowd the edges. If the edges are too crowded, the poster will look cramped and visually unappealing.

- الهامش: هو المساحة الفارغة حول أطراف الملصق أو اللوحة الإعلانية
- اترك هامش ثابت بمقدار 2.5 سم
- لا تزدحم حافة الأطراف. إذا كانت الأطراف مزدحمة جدًا ، وسيبدو الملصق مليئ جداً وغير جذاب بصرياً

Font Type and Size: نوع الخط وحجمه

- Always be sure to choose a font size that is easy to read.
- Simple fonts are better.
- Avoid complicated or decorative fonts that is distracting and hard to read.

- تأكد دائمًا على اختيار حجم خط يسهل قراءته
- الخطوط البسيطة هي الأفضل
- تجنب الخطوط المعقدة أو المزخرفة التي تشتت الانتباه وتصعب القراءة

Colors: الألوان

- Colors help deliver your message and catch attention.
- It's preferable not to add more than three colors.
- Choose color combinations that match.
- Take into consideration the color of the background when choosing the font color.

- تساعد الألوان في إيصال رسالتك ولفت الانتباه
- يُفضل عدم استخدام أكثر من ثلاثة ألوان في الملصق
- اختر توليفات ألوان متناسقة
- ضع في اعتبارك لون الخلفية عند اختيارك للون الخط

Images: الصور

- Use images that match your content.
- Use clear, high-quality, and appropriate images for the content you are sharing.

- استخدم صورًا تتناسب مع محتواك
- استخدم صورًا واضحة وعالية الجودة ومناسبة للمحتوى الذي تشاركه

Al-Faez Exercises

① Choose the correct answer from a, b, c, or d:

1- Program used to create presentations easily ......
a. Word b. Excel c. Publisher d. PowerPoint

2- Program used for writing text and simple posters ......
a. Publisher b. Word c. PowerPoint d. Excel

3- Professional program to design organized posters and flyers ......
a. Word b. PowerPoint c. Publisher d. Excel

4- Bundle required to access the programs ......
a. Microsoft 365 b. Windows 10 c. Google Docs d. Adobe

5- Space around the edges of a poster or billboard ......
a. Margin b. Font c. Color d. Image

6- Recommended margin size for posters ......
a. 1 cm b. 2.5 cm c. 5 cm d. 3 cm

CamScanner

7- Fonts that are simple and easy to read are considered ......
a. Distracting b. Appropriate c. Decorative d. Complex
8- Fonts that are hard to read or decorative are ......
a. Attractive b. Simple c. Clear d. Distracting
9- Maximum number of colors recommended in a poster ......
a. 2 b. 5 c. 4 d. 3
10- Colors should be chosen based on ......
a. Margins b. Background c. Font d. Image
11- Images used in posters should be ......
a. Clear b. Irrelevant c. Blurry d. Small
12- Images should match the ......
a. Content b. Font c. Margin d. Color
13- Microsoft PowerPoint is mainly used for ......
a. Writing text b. Posters c. Flyers d. Presentations
14- Microsoft Publisher is suitable for ......
a. Professional design b. Simple text c. Email d. Notes
15- Keeping edges uncrowded ensures the poster looks ......
a. Cramped b. Appealing c. Blurry d. Distracting

② Put (✓) or (x) in front of each of the following sentences:

1- Colors help deliver the message and catch attention. ( )
2- The background color must be considered when choosing font color.( )
3- Images in posters should be high-quality and appropriate to the content.( )
4- Irrelevant images improve the clarity of the poster. ( )
5- Microsoft Word cannot be used at all to create posters. ( )
6- Microsoft Publisher helps create posters in a disorganized way. ( )
8- Fonts that are hard to read are recommended for posters. ( )
7- PowerPoint can create attractive slides easily and quickly. ( )
9- Digital tools for presenting information include PowerPoint, Word, and Publisher. ( )
10- Keeping margins clear prevents the poster from looking cramped. ( )
11- Digital tools are used to design posters and billboards attractively. ( )
12- Microsoft Word is mainly used to create professional posters and flyers. ( )
13- Microsoft PowerPoint is used to create presentations quickly and easily. ( )
14- Microsoft Publisher is a professional program to design posters and flyers in an organized way. ( )

CamScanner

15- Accessing PowerPoint, Word, and Publisher requires Microsoft 365.( )
16- A poster looks better if the edges are crowded. ( )
17- A fixed margin of 2.5 cm is recommended around the edges of a poster. ( )
18- Using complicated and decorative fonts makes a poster easy to read.( )
19- Simple fonts are preferable because they are easy to read. ( )
20- Using more than three colors is recommended for better visibility. ( )

③ Complete the following with the suitable words in brackets:

(PowerPoint – professional – present – presentations – simple)

1- Tools like PowerPoint, Word, and Publisher are used to …… information attractively.
2- Microsoft 365 is required to access programs like ……, Word, and Publisher.
3- Microsoft PowerPoint is mainly used to create …… quickly and easily.
4- Microsoft Word can be used to write text and create …… posters.
5- Microsoft Publisher allows designing posters and flyers in a …… way.

④ Complete the following sentences with appropriate words:

1- Colors help deliver the message and …… attention.
2- Font color should match the …… color of the background.
3- Images used in posters should be clear, high-quality, and …… to the content.
4- Crowded edges make the poster look …… and visually unappealing.
5- Digital tools help create attractive designs and communicate the …… effectively.
6- A margin is the …… space around the edges of a poster or billboard.
7- The recommended margin size for posters is …… cm.
8- Simple fonts are preferable because they are easy to ……
9- Complicated or decorative fonts are …… and hard to read.
10- It is recommended to use no more than …… colors in a poster.

⑤ Write the scientific concept for each of the following:

1- A digital program used to create presentations easily and quickly.
2- A digital program used mainly for writing text and creating simple posters.
3- A professional program used to design posters and flyers in an organized way.
4- The empty space around the edges of a poster or billboard to make it look visually appealing.
5- Clear, high-quality visuals used to support the content and attract attention.

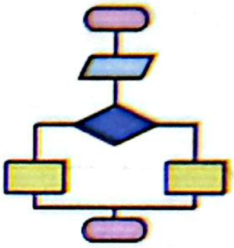
LESSON 3
الخوارزميات

Algorithms

- In our daily life, everything we do is a series of steps; these steps are called algorithms.

هل تعلم أن كل شيء تفعله في يومك عبارة عن سلسلة من الخطوات ؛ هذه الخطوات تسمى خوارزميات

Algorithm الخوارزمية



- It is a set of clear instructions and a series of organized steps to solve a particular problem or do a specific task.

الخوارزمية هي مجموعة محددة من التعليمات الواضحة والخطوات المتسلسلة والمُنظمة التي تُستخدم في حل مشكلة معينة أو القيام بمهمة محددة

- Examples of Algorithms: أمثلة على الخوارزميات

Example 1:

An Algorithm to Add Two Numbers: خوارزمية جمع عددين

1. Enter the first number (A).
2. Enter the second number (B).
3. Calculate the sum: $C = A + B$.
4. Show the result (C).

1. أدخل الرقم الأول (A).
2. أدخل الرقم الثاني (B).
3. احسب المجموع: C = A+B
4. اعرض الناتج (C).

Example 2:

Cleaning your room: تنظيف غرفتك

1. Clean the dust. نظف الغبار	2. Wipe flat surfaces. امسح الأسطح المستوية	3. Clean the floor. نظف الأرضية

Example ❸:

When you solve a word problem in a math class:

❶ You often have to break the question down into parts.
❷ Solve it in a series of steps.
❸ These steps are instructions to solve the problem.

عندما تحل مسألة لفظية في مادة الرياضيات

❶ غالبًا ما يتطلب الأمر تقسيم السؤال إلى أجزاء
❷ حل المسألة على شكل سلسلة من الخطوات
❸ هذه الخطوات تمثل الإرشادات لحل المسألة

Features of a Good Algorithm

خصائص الخوارزمية الجيدة

- **Definiteness (Clarity and Accuracy):** Every step should be clear and not confusing.
- **Input:** It should accept zero or more inputs.
- **Output:** It should produce at least one output, which is the solution.
- **Finiteness:** The algorithm should stop after a limited number of steps.
- **Effectiveness:** Every step should be applicable.

- **الوضوح والدقة:** يجب أن تكون كل خطوة واضحة وغير مُربكة
- **المدخلات :** يجب أن تقبل صفر أو أكثر من المدخلات
- **المخرجات:** يجب أن تنتج مخرجًا واحدًا على الأقل، وهو الحل
- **المحدودية:** يجب أن تتوقف الخوارزمية بعد عدد محدود من الخطوات
- **الفعالية:** يجب أن تكون كل خطوة قابلة للتطبيق

Algorithms and Search Engines : الخوارزميات ومحركات البحث

- Computers and applications use algorithms to do specific tasks, like search engines.

تستخدم أجهزة الكمبيوتر والتطبيقات الخوارزميات لأداء مهام محددة، مثل محركات البحث

CamScanner

- **Algorithms' Job**: Algorithms help the search engine provide results that are most relevant to your search topic.

- **Keywords**: Every time you type keywords in a search engine, the engine uses algorithms to provide results.

- **Search Accuracy**: Choose the accurate keywords when searching.

Notice: If your words are not clear enough, the search engine's algorithm may not give you accurate results.

- **وظيفة الخوارزميات**: تساعد الخوارزميات محرك البحث على تقديم نتائج ذات صلة بموضوع البحث الخاص بك
- **الكلمات المفتاحية**: في كل مرة تكتب فيها كلمات مفتاحية في محرك البحث، يستخدم المحرك خوارزميات ليعرض لك النتائج.
- **دقة البحث**: اختر الكلمات المفتاحية المناسبة عند البحث

لاحظ: إذا لم تكن كلماتك واضحة بما فيه الكفاية، فقد لا تعطيك خوارزمية محرك البحث نتائج دقيقة

- **Smart Algorithms**:

If you use a search engine to find directions to a place, the engine will use the database of names and information from digital maps to give you the results.

الخوارزميات الذكية:

إذا استخدمت محرك بحث للعثور على توجيهات إلى مكان ما، فسيستخدم المحرك قاعدة بيانات الأسماء والمعلومات من الخرائط الرقمية ليعطيك النتائج

Al-Faez Exercises

① Choose the correct answer from a, b, c, or d:

1- A good algorithm should stop after a limited number of steps......
a. Input b. Effectiveness c. Finiteness d. Output

2- Accepting zero or more inputs is a property of......
a. Input b. Algorithm c. Output d. Step

3- Producing at least one output is a property of......
a. Output b. Algorithm c. Input d. Step

4- Every step should be applicable in a good algorithm......
a. Input b. Output c. Effectiveness d. Step

5- Algorithms in search engines help provide......
a. Relevant b. Random c. Input d. Output

CamScanner

LESSON 4

البرمجة لغة الكمبيوتر وتطوير الألعاب

Programming: The Computer Language and Game Development

- Can you imagine talking to a computer in its own language?

هل يمكن أن تتخيل أنك تستطيع التحدث بلغة الكمبيوتر ؟

- The computer language is called coding, it is like writing a very big recipe.

لغة الكمبيوتر تُسمى لغة البرمجة ، وهي مثل كتابة وصفة طعام كبيرة جداً

- Coding:

- It is the writing of multiple algorithms to make a complete program.

البرمجة هي كتابة خوارزميات متعددة لإنشاء برنامج كامل

- Remember:

- Algorithms are instructions and steps that tell the computer what to do, such as:

→ Solve a math problem.

→ Make a falafel sandwich.

- الخوارزميات هي تعليمات وخطوات تُخبر الكمبيوتر بما يجب أن يفعله، مثل:

← حل مسألة رياضية

← تحضير شطيرة فلافل

Coding and the World of Technology

البرمجة في عالم التكنولوجيا

Entertainment

Online animations, movies, and online games are created and designed using coding.

الترفيه: يتم إنشاء وتصميم الرسوم المتحركة والأفلام وألعاب الفيديو باستخدام البرمجة

Creativity

You can create animations, movies, and video games using coding.

الإبداع: يمكنك ابتكار الرسوم المتحركة والأفلام وألعاب الفيديو باستخدام الشفرة البرمجية

CamScanner

Smart Devices

Computers and applications use algorithms to perform specific tasks.

Algorithms are the base of coding.

الأجهزة الذكية: تستخدم أجهزة الكمبيوتر والتطبيقات الخوارزميات لأداء مهام محددة.

الخوارزميات هي أساس البرمجة

Code.org

- There are many websites that help you learn coding, such as Code.org.

هناك العديد من المواقع الإلكترونية التي تساعدك على تعلم البرمجة، مثل: Code.org

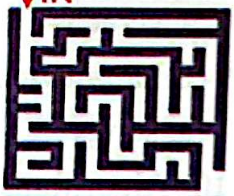
Computational Thinking and Problem Solving

التفكير البرمجي وحل المشكلات

- Coding teaches you how to think logically to solve problems.
- When you code, you give clear instructions to the computer.

- تُعلمك البرمجة كيفية التفكير المنطقي لحل المشكلات
- عندما تكتب برنامجًا، فإنك تُعطي تعليمات واضحة للكمبيوتر

Solving a Maze



❶ Think about the steps you can use to get through the maze.
❷ The steps contain the number of spaces to take, and in which direction.
❸ Follow the steps to get through the maze!
❹ You can create mazes on Code.org.

❶ تحتوي الخطوات على فكر في الخطوات التي يمكنك استخدامها لعبور المتاهة.
❷ عدد المسافات التي يجب اتخاذها وفي أي اتجاه.
❸ اتبع الخطوات لتجاوز المتاهة.
❹ يمكنك إنشاء متاهات على Code.org

Example:

When solving a maze, coding instructions can be like:
"Move two steps up", "Turn one step to the left", and so on.

مثال: عند حل متاهة، يمكن أن تكون تعليمات البرمجة مثل:
"تحرك خطوتين إلى الأعلى"، "انعطف خطوة واحدة إلى اليسار"، وهكذا.

Al-Faez Exercises

① Choose the correct answer from a, b, c, or d:

1- Computer language is called ……
a. coding b. gaming c. typing d. drawing

2- Coding is like writing a big ……
a. story b. recipe c. game d. picture

3- Coding means writing multiple ……
a. games b. devices c. algorithms d. files

4- Algorithms are …… and steps.
a. colors b. pictures c. sounds d. instructions

5- Algorithms tell the computer what to ……
a. do b. see c. hear d. draw

6- Online games are created using ……
a. coding b. typing c. printing d. scanning

7- Animations and movies are part of ……
a. storage b. entertainment c. security d. hardware

8- Coding helps create video ……
a. screens b. cables c. games d. files

9- Smart devices use algorithms to perform ……
a. songs b. colors c. shapes d. tasks

10- Algorithms are the base of ……
a. coding b. typing c. drawing d. playing

11- Code.org is a website to learn ……
a. math b. coding c. music d. art

12- Coding teaches logical ……
a. thinking b. drawing c. singing d. running

13- Coding helps solve ……
a. videos b. pictures c. games d. problems

14- Solving a maze needs clear ……
a. sounds b. colors c. steps d. shapes

15- Maze steps include direction and number of ......

a. spaces b. games c. files d. devices

② Put (✓) or (x) in front of each of the following sentences:

1- Computer language is called coding. ( )
2- Coding is like writing a very small recipe. ( )
3- Coding is writing multiple algorithms to make a complete program. ( )
4- Algorithms are steps and instructions that tell the computer what to do. ( )
5- Making a falafel sandwich is not an example of an algorithm. ( )
6- Online games and animations are created using coding. ( )
7- Coding cannot be used to create movies. ( )
8- Computers and applications use algorithms to perform tasks. ( )
9- Algorithms are not related to coding. ( )
10- Code.org is a website that helps people learn coding. ( )
11- Coding teaches logical thinking and problem solving. ( )
12- Giving unclear instructions is part of coding. ( )
13- Solving a maze can be done using coding instructions. ( )
14- Maze instructions include the number of spaces and direction. ( )
15- Coding cannot be used to create mazes on Code.org. ( )
16- Following steps carefully is not necessary to solve a maze. ( )
17- Coding allows creativity in designing games and animations. ( )
18- Coding only applies to computers, not smart devices. ( )
19- Algorithms are the base of coding. ( )
20- Every time you code, you give clear instructions to the computer. ( )

③ Complete the following with the suitable words in brackets:

(steps – algorithms – coding – recipe - video games)

1- Coding allows creativity in making animations, movies, and ......
2- Computer language is called ......
3- Coding is like writing a very big ......
4- Coding is the writing of multiple ...... to make a complete program.
5- Algorithms are instructions and ...... that tell the computer what to do.

CamScanner

④ Complete the following sentences with appropriate words:

1- Maze steps include the number of spaces to take and the ……

2- Following the steps carefully allows you to get through the ……

3- Coding instructions in a maze can be like "Move two steps up" or "Turn one step to the …… ".

4- Every time you code, you give …… instructions to the computer.

5- Coding is based on using …… to tell the computer what to do.

6- Online animations, movies, and games are created using ……

7- Computers and applications use …… to perform specific tasks.

8- Websites like …… help you learn coding.

9- Coding teaches logical …… to solve problems. ……

10- Solving a maze involves thinking about the …… you can use.

⑤ Write the scientific concept for each of the following:

1- The language used to communicate with a computer through writing instructions.

2- A set of instructions and steps that tell the computer what to do.

3- Websites that help beginners learn how to write code.

4- Logical thinking used to solve problems when writing code.

5- Instructions used to navigate through a maze in programming exercises.

LESSON 5

استكشاف برنامج سكراتش

Exploring the Scratch Program

- Are you ready to become a programmer? هل أنت مستعد لتكون مبرمجا؟
- There are many applications that use block-based coding to teach programming to children.

هناك العديد من التطبيقات التي تستخدم أسلوب البرمجة بالكتل Block لتعليم البرمجة للأطفال

- There are some applications that use block-based coding:

بعض التطبيقات التي تستخدم البرمجة القائمة على الكتل

Scratch برنامج سكراتش	Tynker موقع تينكر	Blockly لغة بلوكلى

- Scratch:

- It is a learning environment that uses a programming language designed for your age (kids and beginners).

It helps turn ideas into stories and interactive games easily.

سكراتش: بيئة تعليمية تستخدم لغة برمجة مصممة خصيصاً لتناسب عمرك (الأطفال والمبتدئين)

تساعد على تحويل الأفكار إلى قصص وألعاب تفاعلية بسهولة

- Tynker:

- It is a learning environment for kids to learn the basics of coding.
- It provides a large collections of projects and lessons.
- It uses a block-based coding interface like Scratch.
- It also supports programming languages such as Python and JavaScript.
- It uses story-based lessons, starting with block-based coding and then moving on to text-based languages like Python and JavaScript.
- Website: https://www.tynker.com.

- تينكر: بيئة تعليمية لتعلم أساسيات البرمجة للأطفال
- توفر مجموعة كبيرة من المشاريع والدروس
- تستخدم واجهة برمجة بالكتل مثل سكراتش
- كما تدعم أيضاً لغات برمجة نصية مثل Python و JavaScript.
- تستخدم دروساً مبنية على القصص، تبدأ بالبرمجة القائمة على الكتل، ثم تنتقل إلى لغات برمجة نصية مثل JavaScript, Python.
- رابط الموقع: https://www.tynker.com

- Blockly:

- It is an open-source visual programming language.
- It is a block-based interface like Scratch, allowing users to drag and drop blocks to solve puzzles and complete tasks.
- It can also be integrated with other programming languages like Python and JavaScript.
- Website: https://blockly.games.

- بلوكلي: لغة برمجة مرئية مفتوحة المصدر
- تتميز بواجهة تعتمد على الكتل مثل اسكراتش، حيث يمكن للمستخدمين سحب وإفلات الكتل لحل الألغاز وإكمال المهام
- يمكن دمجها أيضاً مع لغات برمجة أخرى مثل: Python و JavaScript.
- رابط الموقع: https://blockly.games

Exploring Scratch

استكشاف برنامج سكراتش

- Scratch uses blocks instead of writing complex code and text-based commands.

يستخدم برنامج سكراتش الكتل بدلاً من كتابة رموز برمجية وكلمات معقدة

- Blocks are Commands. Each colored block represents a specific command such as: Move, Say, Play Sound.

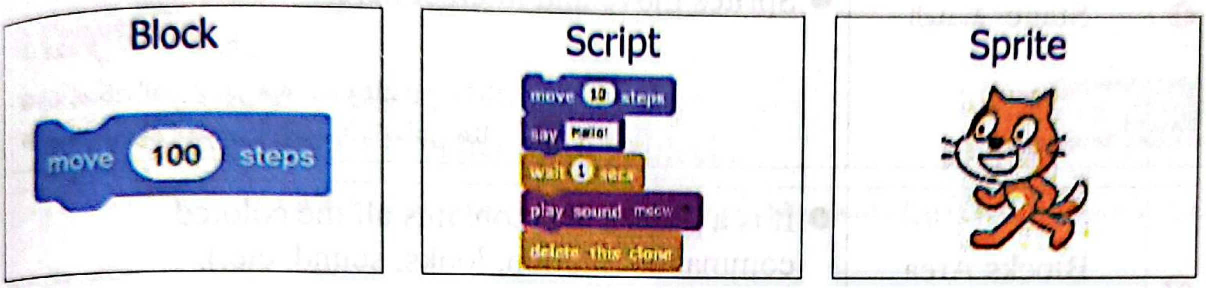
الكتل هي أوامر ، وكل كتلة ملونة تمثل أمرًا محددًا مثل: Move و Say و Play Sound

- To create a complete program, you drag and drop the blocks and connect them together, just like stacking colored building blocks.

لإنشاء برنامج كامل، تقوم بسحب الكتل وإفلاتها وربطها معًا، تمامًا مثل ترتيب مكعبات البناء الملونة فوق بعضها

- **Script:** It is a group of connected blocks that gives instructions to a Sprite.
- **Sprite:** It is the character or object on the screen.

- **المقطع البرمجي:** هو مجموعة من الكتل المتصلة التي تعطي تعليمات للكائن
- **الكائن:** الشخصية أو العنصر الذي يظهر على الشاشة وينفذ الأوامر



- How to Run Scratch: كيفية تشغيل سكراتش

1. You can easily start using Scratch online by the following link:
Go to the official website of Scratch.

- يمكنك البدء بسهولة في استخدام سكراتش عبر الإنترنت من خلال الرابط التالي:
انتقل إلى الموقع الرسمي لبرنامج سكراتش

https://scratch.mit.edu/projects/editor/?tutorial=getStarted

2. Download the Program: You can download the application on your computer to work offline without the Internet.

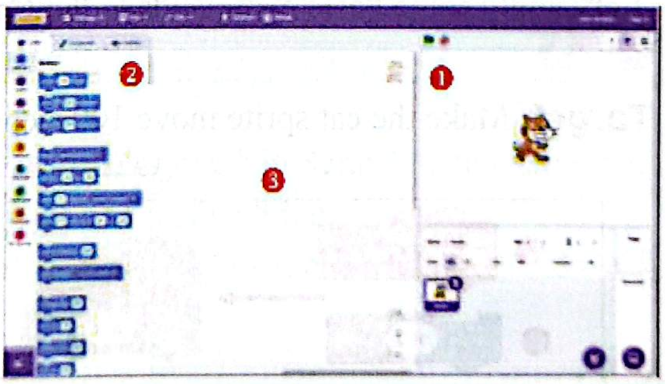
تحميل البرنامج : يمكنك تحميل التطبيق على جهاز الكمبيوتر الخاص بك للعمل بدون الحاجة إلى الإنترنت.

Scratch Main Screen

شاشة سكراتش الرئيسية

- When you open the program, the screen is divided into three main sections that help you build your project.

عند فتح البرنامج، ستجد الشاشة مقسمة إلى ثلاثة أقسام رئيسية تساعدك في بناء مشروعك



CamScanner

	Section Name اسم القسم	Function الوظيفة
1	Stage المنصة	● This is the display screen. ● It's the place where your project appears. ● Sprites move and interact here. ● هذه هي شاشة العرض ● إنه المكان الذي يظهر فيه مشروعك ● حيث تتحرك العناصر الرسومية وتتفاعل هنا
2	Blocks Area منطقة اللبنات	● It is a library that contains all the colored commands (motion, looks, sound, etc.). هي مكتبة تحتوي على جميع الأوامر الملونة (مثل: الحركة، والمظهر والصوت، وغيرها)
3	Scripts Area منطقة المقاطع البرمجية	● It is your workspace. ● Here, you can drag blocks and assemble them to create commands. ● هذه هي مساحة عملك ● هناء يمكنك سحب اللبنات وتجميعها لإنشاء الأوامر البرمجية

- The Default Sprite: الكائن الافتراضي

- The first character you see in Scratch is the Cat Sprite.
- It is ready to follow your commands.

- أول شخصية تراها في سكراتش هي كائن القط
- إنه جاهز لتلقي أوامرك

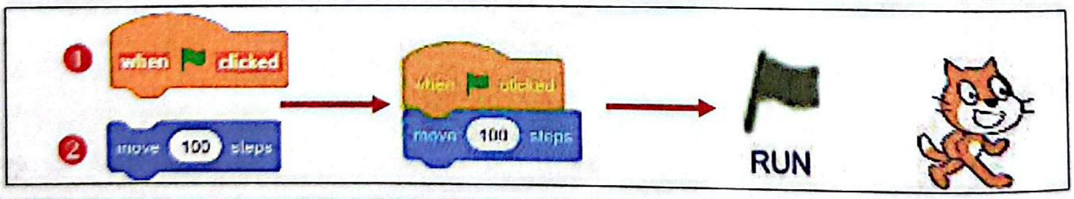
Practical Exercises

Let's apply some basic commands to the Cat Sprite.

لنقم بتطبيق بعض الأوامر الأساسية على كائن القط

Target: Make the cat sprite move 100 steps when you click the green flag.

الهدف جعل القط يتحرك 100 خطوة عندما نضغط على زر التشغيل



CamScanner

❶ Start:

→ From the Events category (yellow), drag the block "When green flag clicked".

البدء: من قسم الأحداث (الأصفر) اسحب الكتلة « عند النقر على (العلم الأخضر)

❷ Creativity:

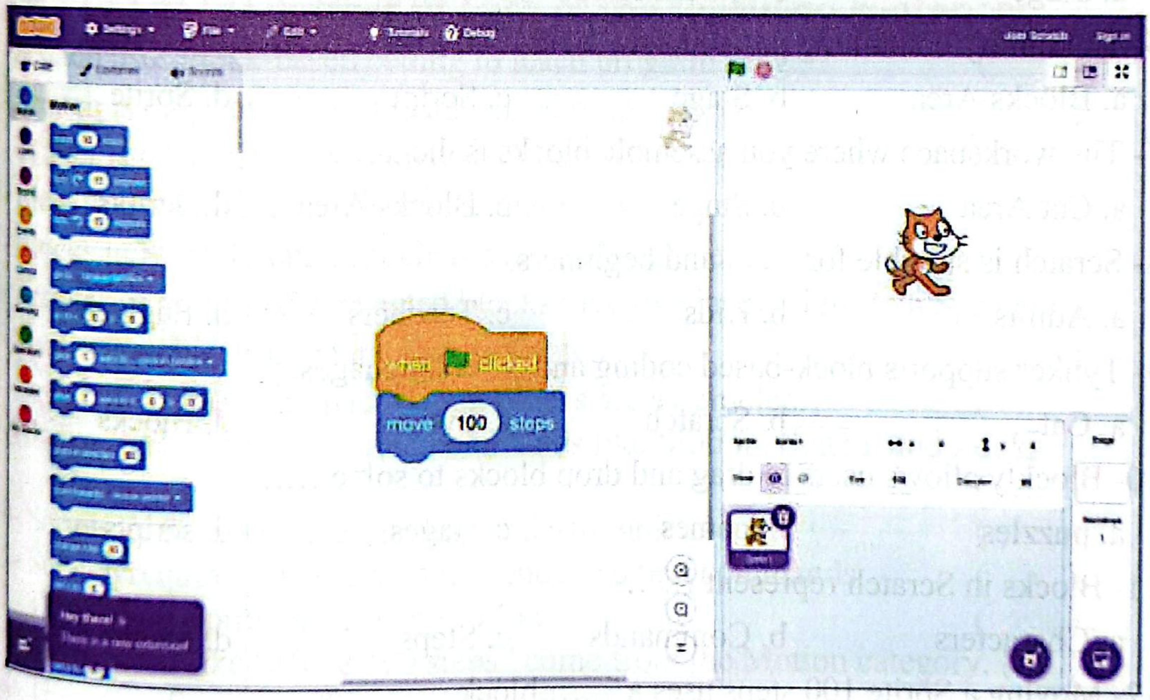
→ From the Motion category (blue), drag the block "Move 100 steps" under the start block.

الأمر: من قسم الحركة (الأزرق) ، اسحب الكتلة (تحرك ١٠٠ خطوة) وضعها أسفل كتلة البدء

❸ Run:

→ Click the green flag and watch the cat move.

التشغيل: انقر على العلم الأخضر وشاهد القط يتحرك.



● **Note:** The function of the block "Next Costume" in Scratch is to change the Sprite's look to make it appear like it is walking.

• وظيفة الكتلة "المظهر التالي" (Next Costume) في سكراتش هي تغيير مظهر الكائن ليبدو كأنه يتحرك

Al-Faez Exercises

① Choose the correct answer from a, b, c, or d:

1- Scratch uses ...... coding to teach programming.
a. block-based b. text-based c. Python d. Java

2- The first character in Scratch is the ...... Sprite.
a. Mouse b. Dog c. Cat d. Bird

3- A group of connected blocks that gives instructions is called a ......
a. Sprite b. Stage c. Block d. Script

4- Characters or objects on the screen are called ......
a. Scripts b. Sprites c. Blocks d. Stages

5- The screen where your project appears is called the ......
a. Stage b. Blocks Area c. Scripts Area d. Cat

6- The library containing colored commands is the ......
a. Blocks Area b. Stage c. Script d. Sprite

7- The workspace where you assemble blocks is the ......
a. Cat Area b. Stage c. Blocks Area d. Scripts

8- Scratch is suitable for ...... and beginners.
a. Adults b. Kids c. Teachers d. Engineers

9- Tynker supports block-based coding and ...... languages.
a. Cat b. Scratch c. Python d. Blocks

10- Blockly allows users to drag and drop blocks to solve ......
a. puzzles b. games c. stages d. scripts

11- Blocks in Scratch represent ......
a. Characters b. Commands c. Steps d. Stages

12- Moving a Sprite 100 steps uses a ...... block.
a. Looks b. Sound c. Motion d. Events

13- Starting a program when the green flag is clicked uses an ...... block.
a. Sound b. Motion c. Looks d. Events

14- Creativity in Scratch is applied by creating stories and ......
a. Stages b. Games c. Blocks d. Scripts

15- Scratch can be used ...... or downloaded to work offline.

a. Online b. Text c. Python d. Stage

16- Blockly is an ...... programming language.

a. souScratch b. Block c. Open d. Python

17- Scripts in Scratch give instructions to a ......

a. Flag b. Stage c. Block d. Sprite

18- Story-based lessons in Tynker start with ...... coding.

a. Block-based b. Text-based c. Python d. JavaScript

19- Scratch blocks are stacked like colored ...... blocks.

a. Motion b. Script c. Building d. Stage

20- To move the Cat Sprite, you click the ......

a. Script b. Blue block c. Stage d. Green flag

② Put (✓) or (x) in front of each of the following sentences:

1- Scratch uses block-based coding to teach programming. ( )
2- Scratch is only for adults and advanced programmers. ( )
3- Tynker is a learning environment similar to Scratch. ( )
4- Blockly is a block-based interface that is open-source. ( )
5- Blocks in Scratch represent characters on the screen. ( )
6- Scripts are groups of connected blocks that give instructions to a Sprite. ( )
7- Sprites are objects or characters in Scratch. ( )
8- The Stage is the workspace where blocks are assembled. ( )
9- Blocks Area contains colored commands like Motion, Sound, and Looks. ( )
10- Scripts Area is where users drag and assemble blocks. ( )
11- Scratch requires writing complex code and text commands. ( )
12- The default Sprite in Scratch is a Cat. ( )
13- Instructions like "Move 100 steps" come from the Motion category. ( )
14- The green flag starts the program in Scratch. ( )
15- Creativity cannot be applied in Scratch projects. ( )
16- Tynker supports programming languages like Python and JavaScript. ( )
17- Scratch cannot be used online and must be installed. ( )
18- Story-based lessons in Tynker start with text-based coding. ( )
19- Blockly allows users to drag and drop blocks to complete tasks. ( )
20- Scratch projects are displayed on the Stage. ( )

21- Scripts are instructions for the Stage, not Sprites. ( )
22- You can download Scratch to use it offline. ( )
23- Scratch blocks are stacked like colored building blocks. ( )
24- Scratch is only used for games and cannot create stories. ( )
25- Using Scratch teaches logical thinking and problem solving. ( )

③ Complete the following with the suitable words in brackets:

(Cat – games – Script - block-based – online)

1- Creativity in Scratch can be applied by creating stories and ……
2- Scratch projects can be used …… or downloaded to work offline.
3- Scratch uses …… coding to teach programming.
4- The first character in Scratch is the …… Sprite.
5- A group of connected blocks that gives instructions is called a ……

④ Complete the following sentences with appropriate words:

1- Characters or objects on the screen are called ……
2- The screen where your project appears is called the ……
3- The library containing colored commands is the ……
4- The workspace where you assemble blocks is the ……
5- Tynker supports block-based coding and …… programming languages.
6- Blockly is an …… programming language that uses blocks.
7- Blocks in Scratch represent ……
8- To start a Scratch program, click the …… flag.
9- Motion blocks are used to make the Sprite ……
10- Scripts give instructions to a …… in Scratch.

⑤ Write the scientific concept for each of the following:

1- A learning environment that uses block-based coding to teach programming to children.
2- A group of connected blocks that gives instructions to a Sprite.
3- Characters or objects on the screen that follow instructions in Scratch.
4- A programming environment that is open-source and uses a block-based interface.
5- Websites that help beginners learn coding using block-based and text-based languages.

CamScanner

LESSON 6
فن الجرافيك
ابتكار وتعديل الصور الرقمية

Graphic Art
Creating and Editing Digital Images

Do you like drawing and coloring?

- In the world of technology, we can do this using computer programs. This is called Graphic Art.

هل تحب الرسم والتلوين؟
في عالم التكنولوجيا، يمكننا القيام بذلك باستخدام برامج الكمبيوتر . هذا ما يُسمى فن الجرافيك

Graphic Art

- It is creating and editing of digital pictures and drawings.

فن الجرافيك: هو ابتكار وتعديل الصور والرسومات الرقمية باستخدام برامج الكمبيوتر

Graphic Art Tools
أدوات تصميم جرافيك

- To make your own drawings or edit pictures, you can use some popular programs such as: لإنشاء رسوماتك الخاصة أو تعديل الصور، يمكنك استخدام بعض البرامج الشائعة مثل

1 Microsoft Paint

- It is a popular graphics editor that will help you create your own drawings or edit images. هو محرر رسومات شائع سيساعدك على إنشاء رسوماتك الخاصة أو تعديل الصور

- To Open Paint program:

❶ Click Start-up menu.
❷ Click Accessories.
❸ Find Paint and click on it.

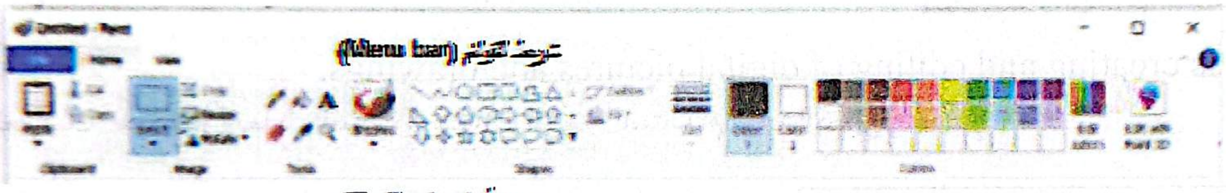
❶ اضغط على قائمة "ابدأ" (Start-up menu).
❷ اضغط على مجلد "الملحقات" (Accessories).
❸ اضغط على برنامج "الرسام" (Paint).

When you open Paint, you will see:

❶ Menu Bar
❷ Toolbox: It contains all the tools you need to draw and color.

عند فتح برنامج الرسام، ستجد:

❶ شريط القوائم
❷ مربع الأدوات الذي يحتوي على جميع الأدوات التي تحتاجها للرسم والتلوين



Some Tools of the Toolbox

بعض أدوات صندوق الأدوات

Tool	Function
	Cropping: It means selecting a specific part of the picture and then removing the rest. القص: يعني اختيار الجزء الذي تريده من الصورة ثم حذف باقي الأجزاء

①

②

A	**To Add text:** → Click on the bottom-right corner of the photo. → Drag your mouse to the right until you have enough space to write your text. لإضافة نص: ← انقر على الزاوية السفلية اليمنى من الصورة ← اسحب مؤشر الفأرة إلى اليمين حتى تتكوّن مساحة بيضاء كافية لكتابة النص
	Change Colors: You can fill colors using the color options in paint. تغير الألوان: يمكنك تعبئة الألوان باستخدام خيارات الألوان في البرنامج
Resize Rotate	**Change Size:** You can change the size of the picture or its direction. تغير الألوان: يمكنك تغيير حجم الصورة أو اتجاهها

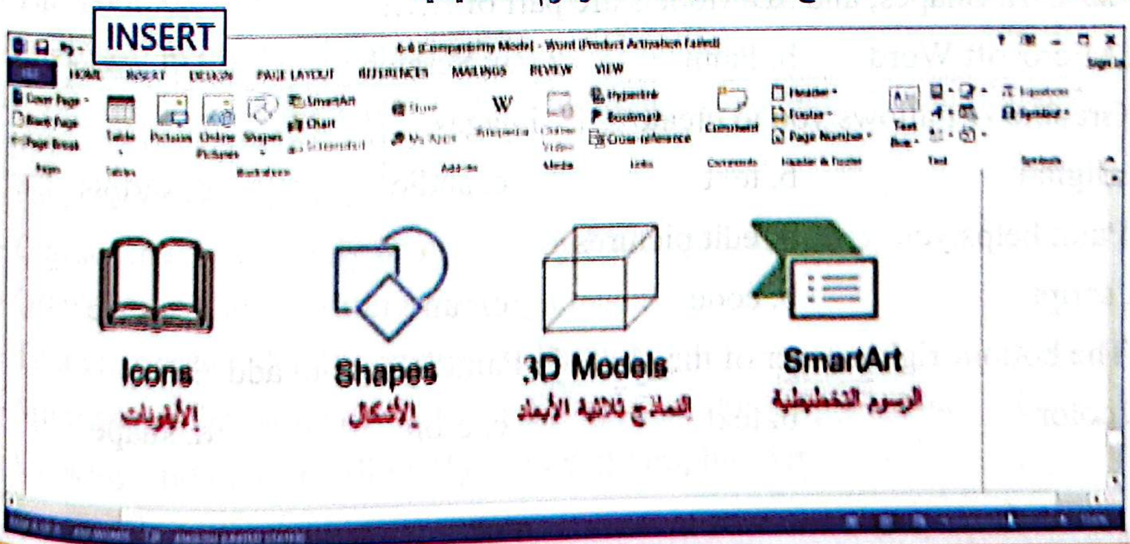
2 Microsoft Word

- Microsoft Word also offers graphic tools to create graphics.
- Click on the **Insert** menu bar to see the different options, such as:

→ Icons → Shapes → 3D Models → SmartArt.

- يوفر برنامج Microsoft Word أيضا أدوات جرافيك لإنشاء الرسومات
- انقر على شريط قائمة إدراج (Insert) لعرض الخيارات المختلفة ، مثل:

الأيقونات ← الأشكال ← النماذج ثلاثية الأبعاد ← الرسوم التخطيطية



Al-Faez Exercises

① Choose the correct answer from a, b, c, or d:

1- Creating and editing digital pictures is called ……

a. Animation b. Coding c. Graphic Art d. Script

2- Microsoft Paint is a popular …… editor.

a. sound b. text c. video d. graphics

3- The menu containing all the tools in Paint is called the ……

a. Toolbox b. Stage c. Script d. Stage Area

4- Selecting a specific part of the picture and removing the rest is called ……

a. Resizing b. Cropping c. Coloring d. Dragging

5- Adding text in Paint is done by dragging the ……

a. script b. keyboard c. mouse d. flag

6- Colors in Paint can be changed using the ……

a. color options b. blocks c. shapes d. icons

7- Changing the size or direction of an image is called ……

a. Typing b. Cropping c. Coloring d. Resizing

8- Microsoft Word provides graphic tools under the …… menu.

a. File b. Start c. Insert d. View

9- SmartArt, Shapes, and 3D Models are part of ……

a. Microsoft Word b. Paint c. Scratch d. Tynker

10- Graphic Art allows you to create …… images.

a. digital b. text c. audio d. scripts

11- Paint helps you …… or edit pictures.

a. script b. code c. run d. create

12- The bottom-right corner of the photo in Paint is used to add ……

a. color b. text c. crop d. shape

13- Graphic Art is done using computer ......

a. programs b. scripts c. languages d. blocks

14- The Toolbox in Paint contains tools for drawing and ......

a. coloring b. coding c. scripting d. typing

15- Popular programs for Graphic Art include Paint and ......

a. Scratch Word b. Microsoft c. Tynker d. Blockly

② Put (✓) or (x) in front of each of the following sentences:

1- Graphic Art is creating and editing digital pictures. ( )
2- Microsoft Paint cannot be used to create drawings. ( )
3- The Toolbox in Paint contains all the tools needed to draw and color.( )
4- Cropping removes the selected part of the picture. ( )
5- Adding text in Paint is done by clicking on the bottom-right corner of the photo. ( )
6- Colors in Paint cannot be changed. ( )
7- Changing the size or direction of a picture is not possible in Paint. ( )
8- Microsoft Word provides graphic tools like Icons, Shapes, and SmartArt. ( )
9- SmartArt is a feature in Microsoft Paint. ( )
10- Graphic Art can be done using computer programs. ( )
11- The menu bar in Paint contains drawing tools. ( )
12- The Toolbox in Paint is not important for creating graphics. ( )
13- Microsoft Word can be used to create 3D models. ( )
14- Cropping is selecting a part of the picture to keep and removing the rest. ( )
15- Paint is not suitable for beginners. ( )
16- Digital images can only be created by hand, not on a computer. ( )
17- Graphic Art allows editing existing images. ( )
18- Text cannot be added to images in Paint. ( )
19- Microsoft Word offers only text editing tools, not graphic tools. ( )
20- Drawing and coloring digitally is part of Graphic Art. ( )

CS CamScanner

③ Complete the following with the suitable words in brackets:

(digital – Cropping – graphics – text – Toolbox)

1- Graphic Art is creating and editing …… pictures.

2- Microsoft Paint is a popular …… editor.

3- The menu containing all drawing tools in Paint is called the ……

4- Selecting a part of the picture and removing the rest is called ……

5- Adding …… in Paint is done by dragging the mouse.

④ Complete the following sentences with appropriate words:

1- The workspace where you create drawings in Paint is accessed from the …

2- Graphic Art tools help to create and …… pictures.

3- Digital images can be created or modified using computer ……

4- To add text in Paint, you click on the …… -right corner of the photo.

5- Using Microsoft Paint, you can draw, color, and change the … of an image.

6- Colors in Paint can be changed using the …… options.

7- Changing the size or direction of a picture is called ……

8- Microsoft Word provides graphic tools under the …… menu.

9- SmartArt, Shapes, and 3D Models are available in ……

10- Drawing and coloring on a computer is part of …… Art.

⑤ Write the scientific concept for each of the following:

1- A type of art that involves creating and editing digital pictures using computer programs.

2- A popular graphics editor used to create drawings and edit images.

3- The part of Paint that contains all the tools needed for drawing and coloring.

4- A feature that selects a specific part of a picture and removes the rest.

5- Microsoft program that provides icons, shapes, 3D models, and SmartArt for creating graphics.

Summary of unit (4)

Lesson 1: Digital Problem Solving.

- In daily life, we may face problems when using technology.

To solve problems easily, follow organized steps:

1- Construct a hypothesis (an educated guess about the problem).
2- Test the hypothesis carefully and safely.
3- Learn from mistakes to improve solutions.

For big problems, break them into smaller parts and solve step by step, ask for help, or share tasks in a group..

- في حياتنا اليومية، قد نواجه مشاكل عند استخدام التكنولوجيا.

لحل المشكلة بسهولة، نتبع خطوات منظمة:

1- تكوين فرضية (تخمين مدروس عن سبب المشكلة).
2- اختبار الفرضية بحذر وأمان.
3- التعلم من الأخطاء لتحسين الحلول.

بالنسبة للمشاكل الكبيرة، نقسمها إلى أجزاء صغيرة ونحل كل جزء خطوة بخطوة، ويمكن طلب المساعدة أو توزيع المهام في الفريق لتسهيل الحل.

Lesson 2: Presenting Information.

- Digital tools are used to design posters or billboards attractively.

Microsoft 365 programs like PowerPoint create presentations, Word can make simple posters, and Publisher allows professional designs.

When designing, pay attention to:

Margins: leave empty space around edges (2.5 cm).

Font type and size: use simple, easy-to-read fonts.

Colors: choose matching colors, no more than three.

Images: use clear images related to the content.

تُستخدم الأدوات الرقمية لتصميم ملصقات أو لوحات إعلانية بشكل جذاب.

برامج Microsoft 365 مثل PowerPoint لإنشاء العروض، وWord لإنشاء ملصقات بسيطة، وPublisher لتصميم احترافي.

عند التصميم يجب الانتباه إلى:

الهوامش: ترك مساحة فارغة حول الحواف (2.5 سم).

نوع وحجم الخط: استخدام خطوط بسيطة وسهلة القراءة.

الألوان: اختيار ألوان متناسقة، لا تزيد عن ثلاثة.

الصور: استخدام صور واضحة ومرتبطة بالمحتوى.

CamScanner

Lesson 3: Tech.

- In daily life, everything we do follows a series of steps called algorithms.

An algorithm is a set of clear and organized instructions to solve a problem or perform a specific task.

Examples include adding two numbers, cleaning a room, or solving math problems step by step.

Features of a good algorithm: clarity, inputs and outputs, limited steps, and applicability.

- Algorithms are used in computers and search engines to provide accurate results based on keywords.
- Smart algorithms use databases and digital information to give the best results, such as directions from digital maps.

في حياتنا اليومية، كل شيء نقوم به يتبع سلسلة من الخطوات تسمى الخوارزميات.

الخوارزمية هي مجموعة من التعليمات الواضحة والمرتبة لحل مشكلة أو أداء مهمة محددة.

أمثلة: جمع رقمين، تنظيف الغرفة، أو حل مسائل رياضية خطوة بخطوة.

خصائص الخوارزمية الجيدة: الوضوح، وجود مدخلات ومخرجات، عدد محدود من الخطوات، وقابلية التطبيق.

تُستخدم الخوارزميات في الحواسيب ومحركات البحث لتقديم نتائج دقيقة بناءً على الكلمات المفتاحية.

تستخدم الخوارزميات الذكية قواعد البيانات والمعلومات الرقمية لإعطاء أفضل النتائج، مثل الحصول على الاتجاهات من الخرائط الرقمية.

Lesson 4: Programming: The Computer Language and Game Development.

- Programming is the way we communicate with a computer by writing code, and it is similar to writing a recipe with clear steps.
- Programming depends on algorithms, which are step-by-step instructions that tell the computer what to do.
- It is used in creating games, movies, applications, and smart devices.
- Programming also helps develop logical thinking and problem-solving skills, and it can be learned through educational websites such as Code.org.

البرمجة هي طريقة التخاطب مع الكمبيوتر من خلال كتابة الأكواد، وهي تشبه كتابة وصفة تحتوي على خطوات مرتبة.

تعتمد البرمجة على الخوارزميات، وهي مجموعة من التعليمات التي توضح للكمبيوتر ماذا يفعل خطوة بخطوة.

تُستخدم البرمجة في تصميم الألعاب والأفلام والتطبيقات وتشغيل الأجهزة الذكية. كما تساعد البرمجة على تنمية التفكير المنطقي والقدرة على حل المشكلات، ويمكن تعلمها من خلال مواقع تعليمية مثل Code.org.

Lesson 5: Exploring the Scratch Program.

- Scratch is a learning environment that uses block-based coding to teach children and beginners the basics of programming.

- It allows users to turn ideas into stories and interactive games easily. The program interface has three main areas:

- Stage to display the project, Blocks Area for the colored commands library, and Scripts Area to create commands by dragging and connecting blocks.

- Characters or objects in Scratch are called Sprites, and instructions can be executed on them using Scripts, such as making the cat move when the green flag is clicked.

برنامج Scratch هو بيئة تعليمية تستخدم البرمجة بالكتل لتعليم الأطفال والمبتدئين أساسيات البرمجة.
يمكن من خلاله تحويل الأفكار إلى قصص وألعاب تفاعلية بسهولة.
تحتوي واجهة البرنامج على ثلاث مناطق رئيسية:
Stage لعرض المشروع، وBlocks Area لمكتبة الأوامر الملونة، وScripts Area لإنشاء الأوامر عن طريق سحب وتجميع الكتل.
الشخصيات أو الكائنات في البرنامج تُسمى Sprites، ويمكن تنفيذ تعليمات عليها عن طريق إنشاء Scripts، مثل تحريك القطة عند الضغط على العلم الأخضر.

Lesson 6: Graphic Art: Creating and Editing Digital Images.

Graphic Art: فن الجرافيك

Graphic Art is the process of **creating and editing digital pictures and drawings** using computer programs. هو عملية إنشاء وتعديل الصور والرسومات الرقمية باستخدام برامج الكمبيوتر

Graphic Art Tools:

There are different programs used to create drawings or edit images, such as:

Microsoft Paint:

- A popular graphics editor used to create drawings and edit images.
- **How to open Paint:**
  Start Menu → Accessories → Paint
- When you open Paint, you will find:
  - **Menu Bar**
  - **Toolbox:** It contains tools for drawing and coloring.

الأدوات :

تُستخدم برامج مختلفة للرسم أو تعديل الصور، من أهمها: **Microsoft Paint**

- برنامج شائع لتحرير الرسومات وإنشاء الرسومات البسيطة.
- **طريقة فتحه:** Start Menu → Accessories → Paint
- عند فتح البرنامج يظهر:
  - **Menu Bar**
  - **Toolbox:** تحتوي على أدوات الرسم والتلوين.

Monthly Exams: Abril

TEST 1

① Choose the correct answer from a, b, c, or d:

1- Computer language is called ……
a. coding b. gaming
c. typing d. drawing

2- Animations and movies are part of ……
a. storage b. entertainment
c. security d. hardware

3- Selecting a specific part of the picture and removing the rest is called ……
a. Resizing b. Cropping
c. Coloring d. Dragging

4- Scratch uses …… coding to teach programming.
a. block-based b. text-based
c. Python d. Java

5- The library containing colored commands is the ……
a. Blocks Area b. Stage
c. Script d. Sprite

6- The first step in solving a technology problem ……
a. Test b. Hypothesis
c. Mistake d. Help

7- Understanding what went wrong in a failed attempt……
a. Hypothesis b. Mistake
c. Learning d. Problem

② Put (✓) or (x) in front of each of the following sentences:

1- Scratch is only for adults and advanced programmers. ( )
2- The background color must be considered when choosing font color. ( )
3- Following steps carefully is not necessary to solve a maze. ( )
4- Effectiveness means each step in an algorithm must be applicable. ( )
5- Microsoft Paint cannot be used to create drawings. ( )
6- PowerPoint can create attractive slides easily and quickly. ( )
7- Keywords typed in a search engine are processed using algorithms. ( )
8- Text cannot be added to images in Paint. ( )

CamScanner

Monthly Exams: Abril

TEST 2

① Choose the correct answer from a, b, c, or d:

1- Coding helps create video ......
 a. screens b. cables
 c. games d. files

2- Online games are created using ......
 a. coding b. typing
 c. printing d. scanning

3- The menu containing all the tools in Paint is called the ......
 a. Toolbox b. Stage
 c. Script d. Stage Area

4- The first character in Scratch is the ...... Sprite.
 a. Mouse b. Dog
 c. Cat d. Bird

5- Characters or objects on the screen are called ......
 a. Scripts b. Sprites
 c. Blocks d. Stages

6- Dividing a big problem into smaller sections......
 a. Organizing b. Breaking
 c. Planning d. Solving

7- Assigning parts of a problem to group members......
 a. Sharing b. Planning
 c. Testing d. Hypothesis

② Put (✓) or (x) in front of each of the following sentences:

1- Colors in Paint cannot be changed. ( )
2- SmartArt is a feature in Microsoft Paint. ( )
3- Each person in a group should work on the same part of the problem.( )
4- Digital tools are used to design posters and billboards attractively. ( )
5- Accessing PowerPoint, Word, and Publisher requires Microsoft 365. ( )
6- Images in posters should be high-quality and appropriate to the content.( )
7- Computers and applications use algorithms for specific tasks. ( )
8- Finiteness means that an algorithm stops after a limited number of steps.( )

CamScanner

TEST 3

① Choose the correct answer from a, b, c, or d:

1- Coding means writing multiple ……
   a. games b. devices
   c. algorithms d. files
2- Creating and editing digital pictures is called ……
   a. Animation b. Coding
   c. Graphic Art d. Script
3- Problems like internet not working are usually……
   a. Small b. Easy
   c. Complicated d. Solved
4- Step-by-step method to solve a problem……
   a. Planning b. Solving
   c. Organizing d. Testing
5- Algorithms are …… and steps.
   a. colors b. pictures
   c. sounds d. instructions
6- The screen where your project appears is called the ……
   a. Stage b. Blocks Area
   c. Scripts Area d. Cat
7- A group of connected blocks that gives instructions is called a ……
   a. Sprite b. Stage
   c. Block d. Script

② Put (✓) or (x) in front of each of the following sentences:

1- Creativity cannot be applied in Scratch projects. (   )
2- Digital tools for presenting information include PowerPoint, Word, and Publisher. (   )
3- A hypothesis is a random guess without any reasoning. (   )
4- Smart algorithms can use databases and digital maps to give directions. (   )
5- Keeping margins clear prevents the poster from looking cramped. (   )
6- Changing the size or direction of a picture is not possible in Paint. (   )
7- Microsoft Publisher is a professional program to design posters and flyers in an organized way. (   )
8- Making a falafel sandwich is not an example of an algorithm. (   )

CamScanner

Unit (3) The night of the exam

- Lesson (1):

Technology in Daily Life:
Technology makes tasks easier and faster, such as shopping, communication, and learning.

Creative Use of Technology:
People use digital tools to design useful applications and websites that solve real-life problems.

Digital Tools:

- Help access services easily, like paying bills or booking tickets.
- Travel and entertainment are simplified: train, airplane, museum, and historical site bookings can be done online.
- Information is widely available through websites like EKB.

Improving Communication:
Technology enhances communication, helps build good relationships, and solves problems.

Main Idea:
Using technology positively helps us become successful digital citizens and supports community growth.

- Lesson (2):

Digital Citizen:
A person who uses technology and the Internet for study, play, and daily activities.
Digital citizenship is **using digital technology ethically, responsibly, and safely.**

Digital Footprint:

- A record of online activity, including websites visited, photos posted, and comments written.
- Keep your digital footprint positive and avoid sharing personal information unsafely.

Rights of a Digital Citizen:

1. **Right to Protection:** No one can copy or share your digital content without permission.
2. **Right to Express Positively:** Share opinions kindly without hurting others.
3. **Right to Safe Internet Access:** Use the Internet safely while following the law.

Responsibilities of a Digital Citizen:

1. **Respect Intellectual Property:** Do not commit piracy (copying or stealing protected content).
2. **Show Positive Behavior:** Be polite online and share ideas responsibly.
3. **Use the Internet Wisely:** Watch useful content and balance online time with family and friends.

Internet Safety Rules:

- Use strong passwords.
- Credit the sources of information.
- Monitor screen time.
- Keep software updated.

Piracy:
Copying or stealing content (like stories or songs) to share or sell without permission is illegal.

- Lesson (3):

There are **two main ways** to communicate online: **Synchronous** and **Asynchronous**.

1. Synchronous Communication:

- Real-time communication, like face-to-face but online.
- Requires **instant response** and happens simultaneously.

Examples:

- Video chats
- Live TV shows
- Phone calls
- Instant chat rooms
- Talking to classmates in class

Tools:

- **Video Chats:** Need a device with camera & microphone, and a video chat app/program.
- **Instant Messaging (IM):** Send texts, pictures, videos instantly using mobile apps or computer programs.
- **Chat Rooms:** Group communication focused on a topic; requires mobile apps or web browsers.

When to Use:

- Need an instant response
- Share information or files quickly
- Discuss school topics fast

---

2. Asynchronous Communication:

- Communication **does not happen in real-time.**
- Messages are sent, and the receiver replies later.

Example:

- **Email:** Used for formal or long messages, such as messages to teachers or officials.
- **Tools:** Email apps or web browsers

When to Use:

- Sending formal messages
- Sending important or large files (homework, projects)
- When an instant response is not needed

Note:

- **Mobile Applications:** Programs on your device giving access to email, IM, social media, and video chats.

- Lesson (4):

Using digital communication tools requires **correct and responsible behavior**.

---

1. Video Chats:

- Join by clicking the link and wait to be allowed in.
- Like a virtual classroom, follow these rules:
    - **Camera & Microphone:** Turn them on with permission.
    - **Respect Others:** Mute microphone when someone is talking.
    - **Camera On:** Dress properly, behave as in public, and avoid showing personal information in the background.

---

2. Chat Rooms:

- Type and send comments; reply to messages from others.
- **Rules:** Be polite, helpful, and positive, as everyone in the chat room can read your messages.

---

3. Instant Messaging (IM):

- Informal and fun way to communicate.

CamScanner

- **Steps to Send a Message:**
  1. Click the person's name.
  2. Type your message.
  3. Click "Send".

---

4. Email:

- Used for formal communication, such as messaging teachers or officials.
- **Steps to Send an Email:**
  1. **To field:** Write recipient's email address.
  2. **Subject line:** Provide a clear title for your email (e.g., Digital Citizenship Homework).
- **Rules:**
  - Use correct grammar.
  - Be polite and clear.
  - Use greetings and closings.
  - Ensure attachments are safe and accurate.

- Lesson (5):

Online Learning:
Learning is no longer limited to the classroom.
You can now learn, communicate with teachers and classmates, and conduct experiments from home using online learning environments.

Online Learning Environments:

- Platforms like **Edmodo** allow teachers and students to communicate remotely.
- Teachers can provide virtual lessons, quizzes, and homework.
- Students can send messages and submit assignments online.

Online Learning Resources:

- Always rely on **reliable sources** when searching for information.

Examples of Resources:

1. **Egyptian Knowledge Bank (EKB):**
   - A large digital library in Egypt with articles and videos on various topics.
   - Website: http://ekb.eg
2. **Vlaby:**
   - A virtual lab platform for interactive experiments.
   - Website: https://vlaby.com
3. **Interactive Mapmaker:**
   - A free tool for tablets and laptops for online mapping and data research.
   - Website: https://mapmaker.nationalgeographic.org

- Lesson (6):

Before starting a digital search, it's important to plan and ensure that the information collected is correct and reliable.

Steps to Plan Your Research:

1. **Choose Your Topic:**
   - Examples: Dinosaurs, space, protecting the environment.
   - Set the goal: What do you know already? What do you want to learn?
   - Take notes and think carefully.
2. **Choose the Types of Sources:**
   - Sources can include text, audio, video, and images.
   - Ask teachers, parents, or librarians to help choose reliable sources.
3. **Evaluate the Sources:**
   - **Reliable Sources:** Written and verified by experts, professional format, correct grammar.
     - Examples: Egyptian Knowledge Bank (EKB), official government sites, digital school books.
   - **Unreliable Sources:** Contain opinions, errors, or false information.
     - Examples: Wiki pages, blogs, social media sites.
   - Always focus on your topic and ask: *Is this reliable?*

Organizing and Writing Your Report:

- Use your notes to create an **outline**:
  1. **Introduction:** Introduce your topic.
  2. **Supporting Paragraphs:** Present the details and findings.
  3. **Conclusion:** Summarize what you learned.

Unit (4)

- Lesson (1):

In daily life, people may face problems when using technology. Although some problems seem difficult, following clear and organized steps makes solving them easier.

Steps to Solve a Problem:

- **Construct a Hypothesis:**
  An educated guess about the cause of the problem and a starting point to test.
- **Test the Hypothesis:**
  Test the idea carefully and safely without damaging the device.
- **Learning from Mistakes:**
  If the solution does not work, think about what went wrong and use what you learned to improve the next hypothesis.

Breaking Down Problems:

Some technology problems are complex, such as Internet issues or apps not opening.
To solve them:

- Break the big problem into smaller parts.
- Solve each part step-by-step.

Real-Life Example:

Organizing a class trip becomes easier when it is divided into small tasks like choosing the destination, setting the date, and calculating the cost.
The same method helps in solving big technology problems.

Important Notes:

- Start with the parts you can solve on your own.
- Ask the teacher for help if the problem is very complicated.
- When working in a group, divide the problem so each person solves one small part.

- Lesson (2):

To present information or advertise an idea in an attractive way, digital tools are used to design digital posters or billboards.

Digital Tools for Presenting Information:
Microsoft 365 provides several programs for designing posters and billboards:

- **Microsoft PowerPoint:**
  Used to create presentations and attractive slides easily.
- **Microsoft Word:**
  Used for writing text and creating simple posters.
- **Microsoft Publisher:**
  A professional program for designing posters and flyers in an organized way.

Note:
Microsoft 365 must be installed and updated on the device to use these programs.

Digital Concepts to Consider:
When designing a poster or billboard, the following concepts should be considered:

- **Margins:**
  Leave empty space around the edges and keep a fixed margin of 2.5 cm.
- **Font Type and Size:**
  Choose clear, simple fonts that are easy to read and avoid complicated styles.
- **Colors:**
  Use no more than three matching colors and consider the background color.
- **Images:**
  Use clear, high-quality images that match the content.

- Lesson (3):

In daily life, many activities are done through a series of steps called **algorithms**.

Algorithm:

An algorithm is a set of clear and organized steps used to solve a problem or perform a specific task.

Examples of Algorithms:

- Adding two numbers by following steps to enter the numbers, calculate the sum, and show the result.
- Cleaning a room by doing tasks in order, such as cleaning dust, wiping surfaces, and cleaning the floor.
- Solving a math word problem by breaking it into parts and solving it step-by-step.

Features of a Good Algorithm:

- **Definiteness:** Steps are clear and accurate.
- **Input:** It can accept one or more inputs.
- **Output:** It produces at least one result.
- **Finiteness:** It ends after a limited number of steps.
- **Effectiveness:** All steps can be performed easily.

Algorithms and Search Engines:

- Computers and applications use algorithms to complete tasks, such as searching the Internet.
- Search engines use algorithms to show the most relevant results.
- Using accurate keywords helps the algorithm give better search results.

Smart Algorithms:

- Search engines use digital maps and databases to provide directions and accurate information.

- Lesson (4):

Coding (Computer Language):

Coding is writing algorithms to create a complete program.
Algorithms are instructions and steps that tell the computer what to do, like solving a problem or performing a task.

Coding and Technology:

- **Entertainment:** Online animations, movies, and games are created using coding.
- **Creativity:** Coding allows you to design animations, movies, and video games.
- **Smart Devices:** Algorithms in coding help computers and apps perform specific tasks.

Learning Coding:

- Websites like **Code.org** help beginners learn coding.
- Coding teaches **computational thinking and problem solving** by giving clear instructions to the computer.

Example – Solving a Maze:

1. Plan the steps to get through the maze.
2. Steps include number of moves and directions.
3. Follow the steps to reach the goal.
4. On Code.org, you can create and solve mazes with instructions like: *"Move two steps up"* or *"Turn one step left."*

- Lesson (5):

Block-Based Coding:
Block-based coding is used to teach programming to children by using visual blocks instead of typing code.

Applications That Use Block-Based Coding:

- **Scratch:**
  A learning environment designed for kids and beginners.
  It helps create stories and interactive games easily.
- **Tynker:**
  A platform for learning the basics of coding.
  It offers many projects and lessons and supports languages like Python and JavaScript.

- **Blockly:**
  An open-source visual programming language.
  It allows users to drag and drop blocks and can be connected with Python and JavaScript.

Exploring Scratch:

- Scratch uses **blocks** instead of complex text-based code.
- Each block represents a **command** such as move, say, or play sound.
- Blocks are connected together to form a complete program.
- **Script:** A group of connected blocks that gives instructions.
- **Sprite:** The character or object on the screen.

How to Run Scratch:

- Scratch can be used **online** through its official website.
- It can also be **downloaded** to work offline without the Internet.

Scratch Main Screen:

Scratch has three main sections:

1. **Stage:**
   The area where sprites move and the project is displayed.
2. **Blocks Area:**
   Contains all the command blocks (motion, looks, sound, etc.).
3. **Scripts Area:**
   The workspace where blocks are combined to create programs.

Default Sprite:

- The Cat Sprite is the default character in Scratch.
- It is ready to follow commands.

Simple Example:

- Click the green flag to start the program.
- Use a motion block to make the cat move 100 steps.

- Lesson (6):

Graphic Art:
Graphic Art is the process of **creating and editing digital pictures and drawings** using computer programs.

Graphic Art Tools:
There are different programs used to create drawings or edit images, such as:

1- Microsoft Paint:
- A popular graphics editor used to create drawings and edit images.
- **How to open Paint:**
  Start Menu → Accessories → Paint
- When you open Paint, you will find:
  - **Menu Bar**
  - **Toolbox:** It contains tools for drawing and coloring.
- Some Paint tools:
  - **Cropping:** Selecting a part of the picture and removing the rest.
  - **Adding Text:** Selecting a space and writing text.
  - **Changing Colors:** Filling colors using color options.
  - **Changing Size or Direction:** Adjusting the picture size or orientation.

2- Microsoft Word:
- Microsoft Word also provides graphic tools.
- From the **Insert** menu, you can add:
  - Icons
  - Shapes
  - 3D Models
  - SmartArt

Final exam TEST 1

① Choose the correct answer from a, b, c, or d:

1- Step-by-step method to solve a problem……
   a. Planning   b. Solving
   c. Organizing   d. Testing
2- Images used in posters should be ……
   a. Clear   b. Irrelevant
   c. Blurry   d. Small
3- A set of clear and organized instructions to solve a problem……
   a. Input   b. Algorithm
   c. Output   d. Step
4- …… helps people do tasks easily and quickly such as shopping, communication and learning.
   a. Technology   b. education
   c. culture   d. history
5- A digital citizen uses technology for study and ……
   a. play   b. sleep
   c. travel   d. eat
6- Chat rooms usually focus on one particular ……
   a. subject   b. person
   c. device   d. game
7- Video chats are similar to a ……
   a. book   b. classroom
   c. game   d. letter

② Put (✓) or (x) in front of each of the following sentences:

1- Learning from mistakes is not necessary when a solution works immediately. (   )
2- Solving a maze can be done using coding instructions. (   )
3- Scratch uses block-based coding to teach programming. (   )
4- Crediting sources is unnecessary when using online information. (   )
5- Instant messaging apps require a camera and microphone to work. (   )
6- Examples of reliable sources include EKB, official government sites, and digital school books. (   )
7- Coding teaches logical thinking and problem solving. (   )
8- Tynker is a learning environment similar to Scratch. (   )

CS CamScanner

Final exam

TEST 2

① Choose the correct answer from a, b, c, or d:

1- Asking a teacher when the problem is too hard……

a. Ignore　　b. Help
c. Test　　d. Break

2- Images should match the ……

a. Content　　b. Font
c. Margin　　d. Color

3- First step to add two numbers……

a. Show　　b. Enter B
c. Calculate　　d. Enter A

4- Creative people use digital technology to find real …… that benefit people.

a. problems　　b. solutions
c. games　　d. devices

5- Digital citizenship means using technology …… and safely.

a. ethically　　b. slowly
c. carelessly　　d. randomly

6- Asynchronous communication does not require an …… response.

a. weekly　　b. slow
c. daily　　d. instant

7- Joining a video chat requires clicking a ……

a. file　　b. button
c. link　　d. program

② Put (✓) or (x) in front of each of the following sentences:

1- Hypothesis, testing, and learning are unrelated steps in problem solving.( )
2- Coding allows creativity in designing games and animations. ( )
3- Unreliable sources include information full of opinions, errors, or lies.( )
4- A digital citizen ignores their rights and responsibilities online. ( )
5- Chat rooms provide communication only between two people. ( )
6- Maze instructions include the number of spaces and direction. ( )
7- Blockly is a block-based interface that is open-source. ( )
8- Sprites are objects or characters in Scratch. ( )

CamScanner

Final exam TEST 3

① Choose the correct answer from a, b, c, or d:

1- A task in organizing a class trip……
  a. Price b. Mistake
  c. Hypothesis d. Test

2- Microsoft PowerPoint is mainly used for ……
  a. Writing text b. Posters
  c. Flyers d. Presentations

3- Last step to add two numbers……
  a. Enter B b. Show result
  c. Calculate sum d. Enter A

4- Useful applications and websites are designed using …… technology tools.
  a. social b. paper
  c. manual d. digital

5- A digital footprint is a record of what you do ……
  a. online b. offline
  c. outside d. home

6- Email is an example of …… communication.
  a. asynchronous b. synchronous
  c. live d. chat

7- Microphone and camera should be …… after getting permission.
  a. off b. on
  c. muted d. hidden

② Put (✓) or (x) in front of each of the following sentences:

1- Every time you code, you give clear instructions to the computer. (   )
2- Scripts are groups of connected blocks that give instructions to a Sprite.(   )
3- Learning is no longer just inside the classroom. (   )
4- Each person in a group should work on the same part of the problem.(   )
5- Algorithms are the base of coding. (   )
6- An outline is used to organize notes and present information logically in a report. (   )
7- Negative online behavior helps maintain a positive digital footprint.(   )
8- Mobile applications are programs that cannot access email or social media. (   )

CamScanner

Final exam TEST 4

① Choose the correct answer from a, b, c, or d:

1- Method used for learning from mistakes……
  a. Testing b. Learning
  c. Breaking d. Hypothesis

2- Microsoft Publisher is suitable for ……
  a. Professional design b. Simple text
  c. Email d. Notes

3- Cleaning dust, wiping surfaces, and cleaning the floor are steps of……
  a. Math b. Algorithm
  c. Input d. Output

4- Digital …… are applications that help people access services easily.
  a. tools b. books
  c. games d. files

5- Keeping a digital footprint positive means not sharing …… information unsafely.
  a. public b. general
  c. personal d. random

6- Synchronous communication is suitable when discussing a school ... quickly.
  a. topic b. book
  c. game d. rule

7- Muting the microphone prevents …… during a video chat.
  a. noise b. messages
  c. emails d. replies

② Put (✓) or (x) in front of each of the following sentences:

1- Coding is writing multiple algorithms to make a complete program. ( )
2- Blocks Area contains colored commands like Motion, Sound, and Looks. ( )
4- Teachers can upload quizzes and homework on Edmodo. ( )
5- Online games and animations are created using coding. ( )
6- Breaking down a problem is only useful for non-technical tasks. ( )
7- Communication that happens at the same time is asynchronous. ( )
8- Evaluating sources helps determine whether information is reliable or unreliable. ( )

Final exam — TEST 5

① Choose the correct answer from a, b, c, or d:

1- Step to start solving a big problem yourself……
a. Plan b. Break
c. Share d. Hypothesis

2- Keeping edges uncrowded ensures the poster looks ……
a. Cramped b. Appealing
c. Blurry d. Distracting

3- Feature that ensures each step is clear and not confusing……
a. Finiteness b. Input
c. Definiteness d. Output

4- Paying a bill can be done easily by using an ……
a. letter b. visit
c. call d. application

5- The right to protection means no one can copy your …… without permission.
a. footprint b. homework
c. files d. passwords

6- Real-time communication requires an …… response.
a. formal b. delayed
c. optional d. instant

7- Camera should be on only when properly ……
a. removed b. hidden
c. muted d. dressed

② Put (✓) or (x) in front of each of the following sentences:

1- Code.org is a website that helps people learn coding. (   )
2- Irrelevant images improve the clarity of the poster. (   )
3- Algorithms are steps and instructions that tell the computer what to do.(   )
4- The green flag starts the program in Scratch. (   )
5- The default Sprite in Scratch is a Cat. (   )
6- The introduction of a report introduces the topic being researched. (   )
7- Email is commonly used in informal situations like chatting with friends. (   )
8- Scripts Area is where users drag and assemble blocks. (   )

Final exam

TEST 6

① Choose the correct answer from a, b, c, or d:

1- Safe method to check if a solution works……
a. Mistake b. Test
c. Break d. Group

2- Recommended margin size for posters ……
a. 1 cm b. 2.5 cm
c. 5 cm d. 3 cm

3- Using keywords in a search engine relies on……
a. Input b. Step
c. Output d. Algorithm

4- Technology helps people …… communication.
a. reduce b. stop
c. improve d. limit

5- Balancing online time with family helps manage ……
a. time b. money
c. food d. sleep

6- Synchronous communication is similar to …… communication but online.
a. face-to-face b. email
c. letter d. text

7- Email is commonly used in …… situations.
a. casual b. formal
c. fun d. instant

② Put (✓) or (x) in front of each of the following sentences:

1- Computer language is called coding. (   )
2- Computers and applications use algorithms to perform tasks. (   )
3- Instructions like “Move 100 steps” come from the Motion category. (   )
4- Microsoft Word cannot be used at all to create posters. (   )
5- The conclusion of a report summarizes final thoughts and what you have learned. (   )
6- Edmodo is an example of an online learning environment. (   )
7- Video chat participants do not need to dress properly if the camera is on. (   )
8- Supporting paragraphs in a report present details from the research. (   )

Final exam

TEST 7

① Choose the correct answer from a, b, c, or d:

1- Using knowledge from errors to improve solutions......
a. Learning b. Planning
c. Breaking d. Hypothesis

2- Fonts that are simple and easy to read are considered ......
a. Distracting b. Appropriate
c. Decorative d. Complex

3- Choosing accurate keywords improves......
a. Input b. Search
c. Algorithm d. Output

4- ...... relationships can be built using technology.
a. weak b. Good
c. broken d. personal

5- Piracy involves copying or ...... content illegally.
a. creating b. sharing
c. stealing d. deleting

6- Communication that happens at the same time is called ......
a. email b. asynchronous
c. synchronous d. chat

7- The "To" field in an email is for the ......
a. date b. sender
c. topic d. recipient

② Put (✓) or (x) in front of each of the following sentences:

1- Microsoft Publisher helps create posters in a disorganized way. ( )
2- You can download Scratch to use it offline. ( )
3- Digital research skills include planning, evaluating sources, and organizing information in a report. ( )
4- Students can conduct experiments at home through online learning. ( )
5- Instant messaging requires formal language similar to emails. ( )
6- Tynker supports programming languages like Python and JavaScript. ( )
7- Planning is important before conducting a digital search. ( )
8- Coding is like writing a very small recipe. ( )

CamScanner

Final exam

TEST 8

① Choose the correct answer from a, b, c, or d:

1- A small part of a big problem......
   a. Section   b. Step
   c. Task   d. Test

2- Fonts that are hard to read or decorative are ......
   a. Attractive   b. Simple
   c. Clear   d. Distracting

3- Smart algorithms use databases and digital maps to provide......
   a. Directions   b. Input
   c. Output   d. Step

4- Technology helps people ...... problems.
   a. ignore   b. create
   c. solve   d. hide

5- Strong ...... help protect online accounts.
   a. passwords   b. games
   c. files   d. websites

6- Examples of synchronous communication include video chats, live television shows, and ......
   a. phone calls   b. emails
   c. homework   d. letters

7- The "Subject" line in an email provides the ...... of the message.
   a. topic   b. greeting
   c. file   d. time

② Put (✓) or (x) in front of each of the following sentences:

1- Blockly allows users to drag and drop blocks to complete tasks. (   )
2- Scratch projects are displayed on the Stage. (   )
3- Reliable sources should always be used when searching for information online. (   )
4- The first step in digital research is choosing your topic. (   )
5- Making a falafel sandwich is not an example of an algorithm. (   )
6- A digital search can include text, audio, video, and images. (   )
7- Fonts that are hard to read are recommended for posters. (   )
8- Technology is used only for entertainment and games. (   )

CamScanner

Final exam

TEST 9

① Choose the correct answer from a, b, c, or d:

1- Assigning parts of a problem to group members……
   a. Sharing   b. Planning
   c. Testing   d. Hypothesis

2- Maximum number of colors recommended in a poster ……
   a. 2   b. 5
   c. 4   d. 3

3- Solving a word problem step by step uses a……
   a. Math   b. Input
   c. Algorithm   d. Output

4- Using technology in a …… way helps people become successful digital citizens.
   a. positive   b. negative
   c. careless   d. unsafe

5- Crediting sources means giving …… to the information you use.
   a. time   b. credit
   c. fun   d. energy

6- Video chats allow direct communication with one or more people who can see and …… each other.
   a. read   b. ignore
   c. hear   d. write

7- Email rules include using correct grammar, being polite, and giving proper …
   a. messages   b. endings
   c. files   d. links

② Put (✓) or (x) in front of each of the following sentences:

1- Technology prevents people from building relationships. (   )
2- Setting the goal helps identify what you already know and what you want to learn. (   )
3- It is acceptable to leave personal information visible in the background during a video chat. (   )
4- EKB provides articles and videos in various fields. (   )
5- Scratch blocks are stacked like colored building blocks. (   )
6- Topics can include dinosaurs, space, or protecting the environment. (   )
7- Using Scratch teaches logical thinking and problem solving. (   )
8- Coding cannot be used to create movies. (   )

CS CamScanner

Final exam

TEST 10

① Choose the correct answer from a, b, c, or d:

1- Problems like internet not working are usually……

a. Small
b. Easy
c. Complicated
d. Solved

2- Colors should be chosen based on ……

a. Margins
b. Background
c. Font
d. Image

3- Breaking a problem into parts before solving it demonstrates……

a. Input
b. Output
c. Finiteness
d. Step-by-step

4- Positive use of technology helps communities …….

a. shrink
b. divide
c. stop
d. grow

5- Updated software helps keep the Internet ……

a. offline
b. slow
c. broken
d. safe

6- Tools needed for instant messaging include a mobile app or a …… program.

a. printer
b. television
c. computer
d. book

7- Email attachments must be safe and ……

a. fun
b. fast
c. casual
d. accurate

② Put (✓) or (x) in front of each of the following sentences:

1- Information is now difficult to find online. ( )

2- Creativity in Scratch can be applied by creating stories and games. ( )

3- Teachers, parents, or school librarians can help choose reliable sources. ( )

4- Reliable sources are written and verified by experts. ( )

5- Vlaby is a virtual lab platform for interactive experiments. ( )

6- Messages in chat rooms should be rude and careless to get attention. ( )

7- Scratch projects can be used online or downloaded to work offline. ( )

8- Algorithms are not related to coding. ( )

CamScanner

Final exam

TEST 11

① Choose the correct answer from a, b, c, or d:

1- The first step in solving a technology problem ......
a. Test b. Hypothesis
c. Mistake d. Help

2- Program used to create presentations easily ......
a. Word b. Excel
c. Publisher d. PowerPoint

3- A good algorithm should stop after a limited number of steps......
a. Input b. Effectiveness
c. Finiteness d. Output

4- Travel has become ...... through booking tickets online.
a. easier b. harder
c. slower d. cheaper

5- Positive expression means sharing ideas ...... without hurting others.
a. negatively b. rudely
c. carelessly d. kindly

6- Asynchronous communication is useful when sending important and ..... files.
a. slow b. small
c. fast d. large

7- Background should not show personal ......
a. photos b. books
c. toys d. information

② Put (✓) or (x) in front of each of the following sentences:

1- The collected information must be correct and reliable. ( )
2- Scratch uses block-based coding to teach programming. ( )
3- Vlaby cannot be used by teachers. ( )
4- Interactive Mapmaker is a free tool for tablets and laptops. ( )
5- Museums and historical places cannot be booked online. ( )
6- A group of connected blocks that gives instructions is called a Script.( )
7- Planning is important before conducting a digital search. ( )
8- Giving unclear instructions is part of coding. ( )

CamScanner

Final exam

TEST 12

① Choose the correct answer from a, b, c, or d:

1- A careful check of your idea……
 a. Test b. Break
 c. Plan d. Learn

2- Program used for writing text and simple posters ……
 a. Publisher b. Word
 c. PowerPoint d. Excel

3- Accepting zero or more inputs is a property of……
 a. Input b. Algorithm
 c. Output d. Step

4- …… for trains and airplanes can be booked online.
 a. hotels b. food
 c. luggage d. Tickets

5- Safe Internet access requires following the ……
 a. time b. habit
 c. rules d. law

6- Mobile applications give direct access to programs such as email, IM, social media, and ……
 a. newspapers chats b. homework
 c. books d. video

7- In chat rooms, everyone can read your ……
 a. games b. files
 c. messages d. emails

② Put (✓) or (x) in front of each of the following sentences:

1- An algorithm is a set of unclear instructions to solve a problem. ( )
2- The Toolbox in Paint contains all the tools needed to draw and color.( )
3- Mapmaker allows online mapping and data collection. ( )
4- Following steps carefully is not necessary to solve a maze. ( )
5- The first character in Scratch is the Cat Sprite. ( )
6- Graphic Art is creating and editing digital pictures. ( )
7- The first step in planning digital research is to choose your topic. ( )
8- The Egyptian Knowledge Bank (EKB) contains only books. ( )

CamScanner

Final exam TEST 13

① Choose the correct answer from a, b, c, or d:

1- Understanding what went wrong in a failed attempt……
a. Hypothesis b. Mistake
c. Learning d. Problem

2- Professional program to design organized posters and flyers ……
a. Word b. PowerPoint
c. Publisher d. Excel

3- Producing at least one output is a property of……
a. Output b. Algorithm
c. Input d. Step

4- Visiting …… and historical places can be booked online.
a. schools b. museums
c. factories d. offices

5- Respecting intellectual property prevents committing ……
a. sharing b. piracy
c. playing d. learning

6- Instant messaging allows sending ……, pictures, and videos instantly.
a. files b. calls
c. text d. papers

7- Chat room messages should be polite, helpful, and ……
a. positive b. negative
c. rude d. careless

② Put (✓) or (x) in front of each of the following sentences:

1- Microsoft Word provides graphic tools like Icons, Shapes, and SmartArt. ( )
2- Adding text in Paint is done by clicking on the bottom-right corner of the photo. ( )
3- Adding two numbers is not an example of a simple algorithm. ( )
4- Examples of topics include dinosaurs, space, or protecting the environment. ( )
5- Online learning tools help students learn only inside school. ( )
6- Students can discover information and conduct experiments at home. ( )
7- Coding cannot be used to create mazes on Code.org. ( )
8- Graphic Art can be done using computer programs. ( )

CamScanner

Final exam

TEST 14

① Choose the correct answer from a, b, c, or d:

1- Dividing a big problem into smaller sections……

a. Organizing	b. Breaking
c. Planning	d. Solving

2- Bundle required to access the programs ……

a. Microsoft 365	b. Windows 10
c. Google Docs	d. Adobe

3- Every step should be applicable in a good algorithm……

a. Input	b. Output
c. Effectiveness	d. Step

4- A large amount of …… is now easily available online.

a. food	b. money
c. information	d. tools

5- Positive online behavior requires being ……

a. polite	b. rude
c. careless	d. lazy

6- Video chats require a device with a camera and a ……

a. keyboard	b. microphone
c. mouse	d. printer

7- Instant messaging is a …… way to communicate.

a. casual	b. formal
c. official	d. serious

② Put (✓) or (x) in front of each of the following sentences:

1- Inaccurate words in a search always give accurate results. ( )

2- Edmodo allows communication between teachers and students regardless of location. ( )

3- The EKB is a digital library in Egypt. ( )

4- The menu bar in Paint contains drawing tools. ( )

5- Coding only applies to computers, not smart devices. ( )

6- Drawing and coloring digitally is part of Graphic Art. ( )

7- Setting the goal includes thinking about what you know and what else you want to learn. ( )

8- Microsoft Word can be used to create 3D models. ( )

Final exam

TEST 15

① Choose the correct answer from a, b, c, or d:

1- The type of guess based on knowledge……

a. Hypothesis b. Test
c. Step d. Section

2- Space around the edges of a poster or billboard ……

a. Margin b. Font
c. Color d. Image

3- Algorithms in search engines help provide……

a. Relevant b. Random
c. Input d. Output

4- The EKB …… is an example of available online information.

a. game b. website
c. device d. app

5- Using the Internet wisely includes watching …… content.

a. boring b. random
c. useful d. negative

6- Synchronous communication happens ……, while asynchronous communication does not.

a. slowly b. simultaneously
c. occasionally d. never

7- Sending an instant message requires clicking on the person's ……

a. email b. photo
c. name d. chat

② Put (✓) or (x) in front of each of the following sentences:

1- Computer language is called coding. ( )
2- Search engines do not rely on algorithms to provide results. ( )
3- Online learning tools help students communicate, learn, and conduct experiments effectively. ( )
4- Piracy is legally copying or sharing content with permission. ( )
5- Interactive Mapmaker cannot be accessed via a web link. ( )
6- Cropping is selecting a part of the picture to keep and removing the rest. ( )
7- Graphic Art allows editing existing images. ( )
8- Technology prevents people from building relationships. ( )

CamScanner

Final exam

① Choose the correct answer from a, b, c, or d:

1- The first step in solving a technology problem ……
a. Test b. Hypothesis
c. Mistake d. Help

2- A good algorithm should stop after a limited number of steps……
a. Input b. Effectiveness
c. Finiteness d. Output

3- Scratch uses …… coding to teach programming.
a. block-based b. text-based
c. Python d. Java

4- Program used to create presentations easily ……
a. Word b. Excel
c. Publisher d. PowerPoint

5- Asking a teacher when the problem is too hard……
a. Ignore b. Help
c. Test d. Break

6- Computer language is called ……
a. coding b. gaming
c. typing d. drawing

7- Space around the edges of a poster or billboard ……
a. Margin b. Font
c. Color d. Image

② Put (✓) or (x) in front of each of the following sentences:

1- Clarity and accuracy in each step are called input. (   )
2- Chat room participants should be helpful and positive. (   )
3- Computers and applications use algorithms to perform tasks. (   )
4- Blockly is a block-based interface that is open-source. (   )
5- The EKB website is an example of available online information. (   )
6- Strong passwords help protect online accounts. (   )
7- Piracy is legally copying or sharing content with permission. (   )
8- Mobile applications give direct access to email, IM, social media, and video chats. (   )

CamScanner

Final exam

TEST 17

① Choose the correct answer from a, b, c, or d:

1- Microsoft Paint is a popular ...... editor.
a. sound
b. text
c. video
d. graphics

2- Selecting a specific part of the picture and removing the rest is called ......
a. Resizing
b. Cropping
c. Coloring
d. Dragging

3- Animations and movies are part of ......
a. storage
b. entertainment
c. security
d. hardware

4- The workspace where you assemble blocks is the ......
a. Cat Area
b. Stage
c. Blocks Area
d. Scripts

5- The screen where your project appears is called the ......
a. Stage
b. Blocks Area
c. Scripts Area
d. Cat

6- Unreliable sources often contain opinions, errors, or ......
a. facts
b. lies
c. data
d. quotes

7- Edmodo is an example of an ...... learning environment.
a. manual
b. physical
c. online
d. casual

② Put (✓) or (x) in front of each of the following sentences:

1- Computer language is called coding. ( )
2- Messages in chat rooms should be rude and careless to get attention.( )
3- Chat room participants should be helpful and positive. ( )
4- Crediting sources is unnecessary when using online information. ( )
5- Reliable sources are written and verified by experts. ( )
6- Synchronous communication is used when quick discussion of school topics is needed. ( )
7- Mobile applications give direct access to email, IM, social media, and video chats. ( )
8- Everything we do in daily life follows a series of steps called algorithms. ( )

Final exam

TEST 18

① Choose the correct answer from a, b, c, or d:

1- Creating and editing digital pictures is called ……
   a. Animation b. Coding
   c. Graphic Art d. Script

2- The menu containing all the tools in Paint is called the ……
   a. Toolbox b. Stage
   c. Script d. Stage Area

3- Characters or objects on the screen are called ……
   a. Scripts b. Sprites
   c. Blocks d. Stages

4- The library containing colored commands is the ……
   a. Blocks Area b. Stage
   c. Script d. Sprite

5- Online games are created using ……
   a. coding b. typing
   c. printing d. scanning

6- Wiki pages, blogs, and social media sites such as …… are considered unreliable sources.
   a. government b. EKB
   c. Facebook d. textbooks

7- Students can send …… to their teachers.
   a. calls b. emails
   c. videos d. messages

② Put (✓) or (x) in front of each of the following sentences:

1- Online games and animations are created using coding. ( )

2- Focusing on your topic is not necessary when evaluating sources. ( )

3- Video chats are like a virtual classroom. ( )

4- Everyone in a chat room can read your messages. ( )

5- Adding two numbers using a series of steps is an example of an algorithm. ( )

6- Real-time communication happens with an instant response. ( )

7- Communication that happens at the same time is asynchronous. ( )

8- A digital citizen uses technology for study and play. ( )

CS CamScanner

* Unit 3 *

* Lesson (1) *

1. (1) a (2) d (3) b (4) c (5) b (6) c (7) b (8) c (9) a (10) d (11) a (12) b (13) d (14) a (15) d
2. (1) ✓ (2) x (3) ✓ (4) x (5) ✓ (6) ✓ (7) x (8) ✓ (9) ✓ (10) ✓ (11) ✓ (12) x (13) ✓ (14)✓ (15) x (16)✓ (17)✓ (18) x (19) ✓ (20) x
3. (1) solutions (2) tools (3) services (4) quickly (5) learning
4. (1) website (2) communication (3) relationships (4) citizens (5) grow (6) app (7) easier (8) online (9) online (10) information
5. (1) Digital tools (2) Technology (3) Digital technology (4) information (5) Positive use of technology

* Lesson (2) *

1. (1) d (2) d (3) b (4) a (5) c (6) a (7) c (8) a (9) b (10) d (11) a (12) a (13) a (14) c (15) a
2. (1) x (2) ✓ (3) x (4) ✓ (5) ✓ (6) x (7) ✓ (8) x (9) ✓ (10) ✓ (11) ✓ (12) x (13) ✓ (14) x (15) ✓ (16) ✓ (17) ✓ (18) x (19) ✓ (20) ✓
3. (1) comments (2) personal (3) digital footprint (4) play (5) safely
4. (1) hurting (2) law (3) piracy (4) positively (5) useful (6) wisely (7) stealing (8) passwords (9) credit (10) safe
5. (1) Digital citizen (2) Digital citizenship (3) Digital footprint (4) Piracy (5) Internet safety rules

* Lesson (3) *

1. (1) d (2) d (3) c (4) b (5) b (6) a (7) c (8) a (9) c (10) c (11) a (12) d (13) a (14) a (15) d
2. (1) ✓ (2) ✓ (3) ✓ (4) ✓ (5) x (6) ✓ (7) ✓ (8) x (9) ✓ (10) x (11) ✓ (12) ✓ (13) x (14) ✓ (15) ✓ (16) ✓ (17) x (18) ✓ (19) x (20) ✓
3. (1) phone calls (2) hear (3) online (4) instant (5) synchronous
4. (1) microphone (2) videos (3) group (4) instant (5) formal (6) files (7) topic (8) video chats (9) later (10) web browsers
5. (1) Synchronous communication (2) Asynchronous communication (3) Email (4) Chat room (5) Mobile applications

* Lesson (4) *

1. (1) d (2) c (3) a (4) a (5) c (6) b (7) d (8) a (9) b (10) d (11) b (12) c (13) b (14) a (15) d
2. (1) x (2) ✓ (3) ✓ (4) ✓ (5) x (6) ✓ (7) x (8) ✓ (9) x (10) ✓ (11) ✓ (12) ✓ (13) ✓ (14)✓ (15) x (16)✓ (17)✓ (18) x (19)✓ (20)✓
3. (1) noise (2) dressed (3) virtual (4) link (5) on
4. (1) name (2) formal (3) email address (4) topic (5) endings (6) accurate (7) personal (8) comments (9) positive (10) casual

* Lesson (5) *

1. (1) a (2) b (3) b (4) c (5) a (6) c (7) d (8) a (9) d (10) b (11) c (12) b (13) d (14) a (15) d
2. (1) ✓ (2) x (3) ✓ (4) ✓ (5) ✓ (6) x (7) ✓ (8) x (9) ✓ (10) ✓ (11) x (12) ✓ (13) ✓ (14) x (15) x
3. (1) classroom (2) classmates (3) experiments (4) online (5) homework
4. (1) laptops (2) mapping (3) mapping (4) research (5) information (6) messages (7) sources (8) library (9) videos (10) lab

* Lesson (6) *

1. (1) a (2) d (3) c (4) b (5) b (6) c (7) a (8) d (9) c (10) b (11) a (12) d (13) d (14) b (15) d
2. (1) ✓ (2) ✓ (3) x (4) ✓ (5) ✓ (6) ✓ (7) ✓ (8) ✓ (9) x (10) ✓ (11) ✓ (12) x (13) ✓ (14) ✓ (15) ✓ (16) x (17) ✓ (18) ✓ (19) ✓ (20) x
3. (1) digital (2) reliable (3) topic (4) environment (5) learn
4. (1) school (2) lies (3) Facebook

CamScanner

(4) logical (5) learned (6) topic (7) sources
(8) librarian (9) experts (10) mistakes

* Revision on unit 3 *

* TEST 1 *

1 (1) c (2) b (3) a (4) a (5) d (6) a (7) d

2 (1)✓ (2)✓ (3) x (4)✓ (5)✓ (6) x (7) x (8) x

* TEST 2 *

1 (1) c (2) a (3) b (4) c (5) b (6) d (7) c

2 (1) x (2)✓ (3)✓ (4)✓ (5)✓ (6) x (7)✓ (8)✓

* TEST 3 *

1 (1) b (2) a (3) a (4) d (5) b (6) b (7) b

2 (1)✓ (2)✓ (3) x (4)✓ (5)✓ (6) x (7) x (8) x

* Unit 4 *

* Lesson (1) *

1 (1) b (2) a (3) c (4) b (5) a (6) b
(7) a (8) a (9) a (10) c (11) b (12) b (13) a
(14) b (15) d

2 (1) x (2) ✓ (3) x (4) ✓ (5) x (6) ✓ (7) x
(8) ✓ (9) x (10) ✓ (11) ✓ (12) x (13) ✓ (14) ✓
(15) x (16) ✓ (17) x (18) ✓ (19) x (20) ✓

3 (1) hypothesis (2) clear (3) testing
(4) mistakes (5) sections

4 (1) safely (2) learning (3) dividing
(4) hypothesis (5) logical
(6) step-by-step (7) complicated
(8) collaborative (9) help (10) trip

5 (1) Hypothesis
(2) Testing the Hypothesis
(3) Learning from Mistakes
(4) Breaking Down Problems
(5) Collaborative Problem Solving

* Lesson (2) *

1 (1) d (2) b (3) c (4) a (5) a (6) b (7) b
(8) d (9) d (10) b (11) a (12) a (13) d
(14) a (15) b

2 (1) ✓ (2) ✓ (3) ✓ (4) x (5) x (6) x (7) ✓
(8) x (9) ✓ (10) ✓ (11) ✓ (12) x (13) ✓ (14) ✓
(15) ✓ (16) x (17) ✓ (18) ✓ (19) ✓ (20) x

3 (1) present (2) PowerPoint
(3) presentations (4) simple (5) professional

4 (1) catch (2) background (3) appropriate
(4) cramped (5) message (6) empty (7) 2.5
(8) read (9) distracting (10) three

5 (1) Microsoft PowerPoint
(2) Microsoft Word (3) Microsoft Publisher
(4) Margin (5) Images

* Lesson (3) *

1 (1) c (2) a (3) a (4) c (5) a (6) d (7) b (8) a
(9) c (10) d (11) b (12) d (13) b (14) b (15) c

2 (1) ✓ (2) x (3) ✓ (4) x (5) ✓ (6) x (7) ✓
(8) ✓ (9) x (10) ✓ (11) ✓ (12) x (13) ✓ (14) x
(15) ✓ (16) x (17) ✓ (18) x (19) ✓ (20) ✓

3 (1) steps (2) applicable (3) algorithm
(4) inputs (5) keywords

4 (1) algorithm (2) maps (3) tasks
(4) concept (5) numbers (6) example
(7) parts (8) confusing
(9) output (10) Search engines

5 (1) Algorithm (2) Input (3) Output
(4) Definiteness (5) Smart Algorithm

* Lesson (4) *

1 (1) a (2) b (3) c (4) d (5) a (6) a (7) b (8) c
(9) d (10) a (11) b (12) a (13) d (14) c (15) a

2 (1) ✓ (2) x (3) ✓ (4) ✓ (5) x (6) ✓ (7) x
(8) ✓ (9) x (10) ✓ (11) ✓ (12) x (13) ✓ (14) ✓
(15) x (16) x (17) ✓ (18) x (19) ✓ (20) ✓

3 (1) video games (2) coding
(3) recipe (4) algorithms (5) steps

4 (1) direction (2) maze (3) left (4) clear
(5) algorithms (6) coding (7) algorithms
(8) Code.org (9) thinking (10) steps

5 (1) Coding (2) Algorithm (3) Code.org
(4) Computational Thinking (5) Maze Steps

Al-Faez
CS CamScanner

* Lesson (5) *

1. (1) a (2) c (3) d (4) b (5) a (6) a (7) d (8) b (9) c (10) a (11) b (12) c (13) d (14) b (15) a (16) a (17) d (18) a (19) c (20) d
2. (1) ✓ (2) x (3) ✓ (4) ✓ (5) x (6) ✓ (7) ✓ (8) x (9) ✓ (10) ✓ (11) x (12) ✓ (13) ✓ (14) ✓ (15) x (16) ✓ (17) x (18) x (19) ✓ (20) ✓ (21) x (22) ✓ (23) ✓ (24) x (25) ✓
3. (1) games (2) online (3) block-based (4) Cat (5) Script
4. (1) Sprites (2) Stage (3) Blocks Area (4) Scripts Area (5) Python and JavaScript (6) open-source (7) commands (8) green (9) move (10) Sprite
5. (1) Scratch (2) Script (3) Sprite (4) Blockly s(5) Tynker

* Lesson (6) *

1. (1) c (2) d (3) a (4) b (5) c (6) a (7) d (8) c (9) a (10) a (11) d (12) b (13) a (14) a (15) b
2. (1) ✓ (2) x (3) ✓ (4) x (5) ✓ (6) x (7) x (8) ✓ (9) x (10) ✓ (11) ✓ (12) x (13) ✓ (14) ✓ (15) x (16) x (17) ✓ (18) x (19) x (20) ✓
3. (1) digital (2) graphics (3) Toolbox (4) Cropping (5) text
4. (1) Toolbox (2) edit (3) programs (4) bottom (5) size (6) color (7) resizing (8) Insert (9) Microsoft Word (10) Graphic
5. (1) Graphic Art (2) Microsoft Paint (3) Toolbox (4) Cropping (5) Microsoft Word

* Revision on unit 4 *

* TEST 1 *

1. (1) a (2) b (3) b (4) a (5) a (6) b (7) c
2. (1) x (2)✓ (3) x (4)✓ (5) x (6)✓ (7)✓ (8) x

* TEST 2 *

1. (1) c (2) a (3) a (4) c (5) b (6) b (7) a
2. (1) x (2) x (3) x (4)✓ (5)✓ (6)✓ (7)✓ (8) ✓

* TEST 3 *

1. (1) c (2) c (3) c (4) b (5) d (6) a (7) d
2. (1) x (2)✓ (3) x (4)✓ (5)✓ (6) x (7)✓ (8) x

* Final Exams *

* TEST 1 *

1. (1) b (2) a (3) b (4) a (5) a (6) a (7) b
2. (1) ✓ (2) ✓ (3) ✓ (4) x (5) x (6) ✓ (7) ✓ (8) ✓

* TEST 2 *

1. (1) b (2) a (3) d (4) b (5) a (6) d (7) c
2. (1) x (2) ✓ (3) ✓ (4) x (5) x (6) ✓ (7) ✓ (8) ✓

* TEST 3 *

1. (1) a (2) d (3) b (4) d (5) a (6) a (7) b
2. (1) ✓ (2) ✓ (3) ✓ (4) x (5) ✓ (6) ✓ (7) x (8) x

* TEST 4 *

1. (1) b (2) a (3) b (4) a (5) c (6) a (7) a
2. (1) ✓ (2) ✓ (3) ✓ (4) ✓ (5) ✓ (6) x (7) x (8) ✓

* TEST 5 *

1. (1) d (2) b (3) c (4) d (5) a (6) d (7) d
2. (1) ✓ (2) x (3) ✓ (4) ✓ (5) ✓ (6) ✓ (7) x (8) ✓

* TEST 6 *

1. (1) b (2) b (3) d (4) c (5) a (6) a (7) b
2. (1) ✓ (2) ✓ (3) ✓ (4) x (5) ✓ (6) ✓ (7) x (8) ✓

*** TEST 7 ***

❶ (1) a (2) b (3) b (4) b (5) c (6) c (7) d

❷ (1) x (2) ✓ (3) ✓ (4) ✓ (5) x (6) ✓ (7) ✓ (8) x

*** TEST 8 ***

❶ (1) a (2) d (3) a (4) c (5) a (6) a (7) a

❷ (1) ✓ (2) ✓ (3) ✓ (4) ✓ (5) x (6) ✓ (7) x (8) x

*** TEST 9 ***

❶ (1) a (2) d (3) c (4) a (5) b (6) c (7) b

❷ (1) x (2) ✓ (3) x (4) ✓ (5) ✓ (6) ✓ (7) ✓ (8) x

*** TEST 10 ***

❶ (1) c (2) b (3) d (4) d (5) d (6) c (7) d

❷ (1) x (2) ✓ (3) ✓ (4) ✓ (5) ✓ (6) x (7) ✓ (8) x

*** TEST 11 ***

❶ (1) b (2) d (3) c (4) a (5) d (6) d (7) d

❷ (1) ✓ (2) ✓ (3) x (4) ✓ (5) x (6) ✓ (7) ✓ (8) x

*** TEST 12 ***

❶ (1) a (2) b (3) a (4) d (5) d (6) d (7) c

❷ (1) x (2) ✓ (3) ✓ (4) x (5) ✓ (6) ✓ (7) ✓ (8) x

*** TEST 13 ***

❶ (1) c (2) c (3) a (4) b (5) b (6) c (7) a

❷ (1) ✓ (2) ✓ (3) x (4) ✓ (5) x (6) ✓ (7) x (8) ✓

*** TEST 14 ***

❶ (1) b (2) a (3) c (4) c (5) a (6) b (7) a

❷ (1) x (2) ✓ (3) ✓ (4) ✓ (5) x (6) ✓ (7) ✓ (8) ✓

*** TEST 15 ***

❶ (1) a (2) a (3) a (4) b (5) c (6) b (7) c

❷ (1) ✓ (2) x (3) ✓ (4) x (5) x (6) ✓ (7) ✓ (8) x

*** TEST 16 ***

❶ (1) b (2) c (3) a (4) d (5) b (6) a (7) a

❷ (1) x (2) ✓ (3) ✓ (4) ✓ (5) ✓ (6) ✓ (7) x (8) ✓

*** TEST 17 ***

❶ (1) d (2) b (3) b (4) d (5) a (6) b (7) c

❷ (1) ✓ (2) x (3) ✓ (4) x (5) ✓ (6) ✓ (7) ✓ (8) ✓

*** TEST 18 ***

❶ (1) c (2) a (3) b (4) a (5) a (6) c (7) d

❷ (1) ✓ (2) x (3) ✓ (4) ✓ (5) ✓ (6) ✓ (7) x (8) ✓

"With best wishes for success"

Al Faez